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# Index to FAA Office of Aviation Medicine Reports: 1961 Through 2000

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Final Report

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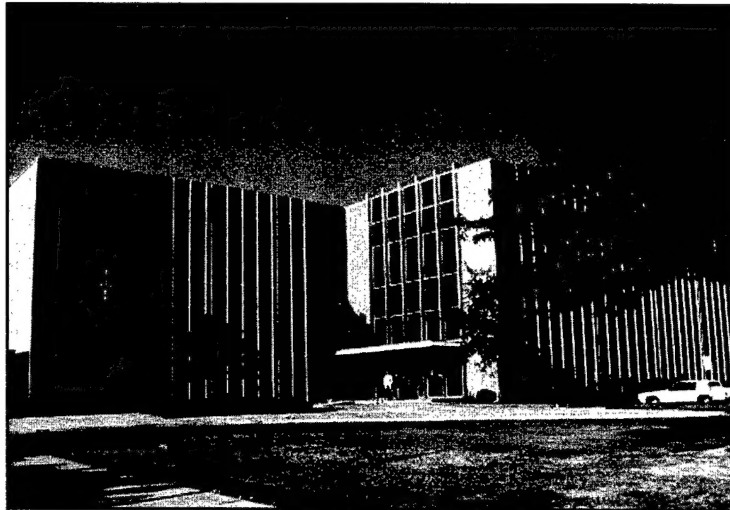
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16. Abstract An index to Federal Aviation Administration Office of Aviation Medicine Reports (1964-2000), CARI Reports (1961-1963), and Civil Aeromedical Institute Reports is presented for those engaged in aviation medicine and related activities. The index lists all FAA aviation medicine reports published from 1961 through 2000: chronologically, alphabetically by author, and alphabetically by subject. A foreword describes historical aspects of the Civil Aeromedical Institute's 40 years of service, describes the index's sections, and explains how to obtain copies of published Office of Aviation Medicine technical reports.			
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## Foreword

# INDEX TO FAA OFFICE OF AVIATION MEDICINE REPORTS: 1961 THROUGH 2000

## SOME HISTORICAL OBSERVATIONS OF CARI/CAMI 1960-1984

S.R. Mohler, M.D., K.A. Hayes, and W.E. Collins, Ph.D.



*Completed in 1962, the Civil Aeromedical Institute is the home of aeromedical research, certification, education, and occupational health programs (photo circa 1985).*

The Civil Aeromedical Research Center, later called the Civil Aeromedical Research Institute (CARI), was established in August 1960 to develop medical data to meet the problems of civil air operations as civil aviation moved into higher altitudes and supersonic speeds. CARI was placed under the executive and technical direction of the Research Requirements Division, Bureau of Aviation Medicine. Hilliard D. Estes, M.D., a physician in the U.S. Public Health Service, was appointed the first Medical Director of CARI, and Robert P. Clark, Ph.D., was appointed the first Research Director. This dual-directors situation resulted in some confusion regarding primacy of roles, but was resolved when, on August 7, 1961, S.R. Mohler, M.D., was appointed Director of the Civil Aeromedical Research Institute and W.E. Collins, Ph.D., was already recently onboard instituting vestibular and visual research. There were approximately 20 full-time scientists and research support personnel at the new institute plus additional administrative and secretarial staff.

CARI consisted of an Office of the Director, Audio Visuals Service and Research Engineering, and six branches specializing in the areas of biochemistry, biodynamics, environmental physiology, psychology, protection and survival, and neurophysiology. A total of 21 positions was authorized in the operations appropriation for CARI at that time. Researchers concentrated on the following types of projects: (1) man's aging process and the relation to chronological age and pilot proficiency; (2) selection criteria for and environmental stress factors experienced by air traffic controllers; and (3) inflight fatigue affecting flight engineering on jet aircraft. Researchers were housed in several temporary wooden buildings and a gymnasium that were owned by the University of Oklahoma and located at Westheimer Field (a former World War II naval aviation training base) in Norman, Oklahoma, until the CARI Building was completed in October 1962.



The scientists noted above had drawn up their respective aeromedical research projects and had planned and designed the layout for their individual laboratory space in the emerging new 220,000 square foot, four level (one level underground) medical research building at the Aeronautical Center, Will Rogers Field, Oklahoma City. This was said to be the first time that an enthusiastic cadre of scientists had a major role in the design and preparation of their future institute's laboratories.

The scientists were drawn from the US Air Force at Randolph Field, the US Army, the University of Oklahoma Medical School, Ohio State University (the group of protection and survival research personnel led by John J. Swearigen who had previously been moved from the Aeronautical Center to Ohio State University by the Civil Aviation Administration and were now being returned by the FAA to Oklahoma), and other organizations.

In June 1962, the Office of the Deputy Civil Air Surgeon for Research and Operations and the Certification, Research, and Standards Divisions under the Civil Air Surgeon in FAA Headquarters were all moved to Oklahoma City. Also, as a part of this move, the Washington Office Clinic became a part of a new medical Clinical Services Division. The Deputy Civil Air Surgeon was established to provide centralized medical standards, certification, research, and clinic activities for the agency. The only medical operation retained at FAA Headquarters at that time was program planning and management in the immediate Office of the Civil Air Surgeon. The Deputy Civil Air Surgeon's charge consisted of a Medical Research Division (which included CARI and FAA's Clinical Research Institute in Georgetown), Medical Clinical Services Division, Medical Certification Division, and Medical Standards Division. A total of 112 positions was allocated to this organization. This included 50 positions in the operations appropriation and 62 in the facilities, engineering, and development (FE&D) appropriation.

As the scientists settled into the new CARI facility during the fall of 1962 and began their respective aeromedical research studies, a troubling cloud appeared in the form of a Congressional House of Representatives mandated budget ceiling on personnel and funding for the new institute, imposed by Mr. Albert Thomas, then congressman from Houston, Texas, and a powerful appropriations committee chairman. There was, at that time, some tension between Mr. Thomas and Oklahoma Senator Robert S. Kerr regarding the establishment of several FAA and NASA sites.

The planned institute staffing of 212 persons was formally cut back to 100. Recruiting activities for scientists and research support personnel were slowed and the number of planned projects was reduced. The time of the institute's scientists was concentrated on regrouping and reformulating their research plans, and the new Director and the branch chiefs spent much time juggling priorities. When the new institute building was dedicated in October 1962, Mr. Najeeb Halaby, FAA Administrator, invited Mr. Thomas to participate in the proceedings, but that participation had no ameliorative effect on the budget ceiling for the institute.

A peculiar development had occurred in 1960-61 in that the FAA instituted the Georgetown Clinical Research Facility (approximately 20 persons in 1961), later renamed the Georgetown Clinical Research Institute (GCRI). The purpose of the GCRI was to study "longitudinal" pilot aging and look for ways to make individual exceptions to the 1961 FAA "age 60" mandatory retirement regulation for airline pilots. It developed that a similar longitudinal research program on airline pilots was established in 1960 by the National Institutes of Health (NIH) at the Lovelace Foundation, Albuquerque, New Mexico, with the help of S.R. Mohler, M.D., a Public Health Service officer in the Center for Aging Research at NIH, who was about to be offered the Directorship of CARI. Moreover, some FAA Headquarters personnel suggested closing CARI and enlarging the GCRI as they felt it more convenient to administer a medical research program in the same town as FAA headquarters rather than one in Oklahoma.

An assessment of the FAA Headquarters/Aeronautical Center medical structure in December 1962 resulted in the abolishment of the Office of the Deputy Civil Air Surgeon and the transfer of the Standards Division back to FAA Headquarters to augment the Civil Air Surgeon in a major realignment of the Aviation Medical Service. The other existing medical divisions at the Aeronautical Center were retained and reported directly to the Civil Air Surgeon.

In January 1964, CARI was placed under the executive and technical direction of the new Washington-based Aeromedical Education and Research Division in the Aviation Medicine Service. At that time, under Federal Air Surgeon M.S. White, M.D., the Georgetown Clinical Research Institute became a branch of this new division which was established to plan and direct research activities at a national level. The restructuring was part of a poorly executed and unsuccessful decision to reorganize

and reduce CARI research staffing and functions. This decision received significant public attention and contributed to later changes in Washington leadership. As one further, but temporary result, in July 1965, Administrator Halaby directed that the medical research program be managed directly by the Federal Air Surgeon.

The CARI medical certification, research, and clinic activities were reorganized into one division in October 1965. At that time, the Institute was renamed the Civil Aeromedical Institute (CAMI) and was placed under the executive direction of the new Aeronautical Center Director, Mr. Lloyd Lane. Technical direction continued to be provided by the Federal Air Surgeon. CAMI consisted of four branches – Administrative and Technical Branch, Aeromedical Certification Branch, Aeromedical Research Branch, and Aeromedical Services Branch. J. Robert Dille, M.D., was named chief of CAMI in December 1965. A total of 172 positions (93 operations and 79 RE&D) were authorized to CAMI at that time, representing what proved to be a one-year reduction of 21 RE&D positions.

The issue of CARI versus GCRI was settled by the Government Accounting Office in a report that recommended closing GCRI, due in part to its duplication of the NIH supported Lovelace longitudinal aging study of pilots. The new Federal Air Surgeon, Peter Siegal, M.D., also had received an Ad Hoc Advisory Committee report to the effect that the GCRI was not following a clear statistical design relative to its study population and, accordingly, had made no notable progress toward achieving the goal for which it had been established. Moreover, the cost of maintaining two medical research facilities – one overcrowded (GCRI) and one underutilized due to the Congressional ceiling situations – was more than difficult to defend. The GCRI positions and dollars were moved to CAMI in 1966 restoring the CAMI level to 100 positions.

At that time, newly appointed FAA Administrator, William McKee, gave a speech to an Aerospace Medical Association annual meeting and stated that CARI would contract for a large moveable hydraulic lift platform that had capabilities of tilting and would raise the fuselage of an airline-type aircraft for passenger emergency evacuation studies. The money from GCRI was used for this platform and, as only one GCRI person elected to move to Oklahoma, the position authorizations began to be melded into the Institute in Oklahoma. By this time, S.R. Mohler, M.D., had moved to Washington and had assisted in preparing the Administrator's speech. The

evacuation simulator proposal seemed very timely as several airline accidents involving passenger evacuation problems had occurred in the relatively recent past.

In 1966, a Clinical Research Laboratory was established in the Aeromedical Research Branch in which to place the scientists from the FAA's closed out Georgetown Clinical Research Institute. In August 1968, the aeromedical education function was moved from the Aviation Medical Service in FAA Headquarters to CAMI so that existing CAMI facilities (altitude chambers, etc.) could be utilized. At that time, the Aeromedical Education Branch was established. With this came the responsibility of aeromedical education and information programs supporting safety and promotion of civil aviation; and development of standards and procedures governing the selection, designation, training, and management of physicians appointed to conduct aviation medical examinations of civil airmen in the U.S. and abroad. Also in 1968, a Technical Staff and Administrative Staff were established to assume functions of the former Administrative and Technical Branch; however, these functions were later moved to the Aeromedical Research Branch and the division office in July 1979. A biostatistical staff was established in June 1968 but was later moved to the Aeromedical Research Branch in April 1975. The Aeromedical Services Branch was retitled Aeromedical Clinical Branch in June 1968; that branch was abolished by the Federal Air Surgeon in May 1981 based on new funding restrictions and established priorities, but the Aeronautical Center Director reestablished and staffed it in October 1981, under CAMI direction, in order to support the training aspects of the air traffic recovery program. (For most of the decade, the Aeronautical Center budgeted for the clinic function and transferred funding to CAMI; CAMI negotiated successfully to reestablish budgeting authority through OAM in the early 1990s.) CAMI was thus structured with an Aeromedical Research Branch, Aeromedical Certification Branch, Aeromedical Education Branch, and Aeromedical Clinical Branch.

In the late 1960s and into the early 1970s, a series of events arose in aviation that led to the vitiation of the earlier mentioned resource ceiling on FAA medical research resources. Serious labor problems with the FAA air traffic controllers and FAA management at the facility, area, regional, and Washington headquarters levels began to develop throughout the National Aerospace System. The "vacuum tube" air traffic control hardware and the problems with the new software along with the necessary

shift work rotations began to escalate air traffic controller stress concerns. The contributions by researchers at CAMI and the need to properly support CAMI scientists with respect to air traffic controller psychological, physiological, and medical aspects were becoming apparent. Mr. Albert Thomas had passed away in 1966, but the funding ceiling for CAMI persisted through 1983 (although by 1972 overall RE&D funding for OAM began to increase). Moreover, in 1973 the number of authorized research positions dropped from 100 to 97, a loss that was later attributed to an error on the part of the FAA budget office. When the loss was called to the attention of the budget office, a decision was allegedly made to leave it at 97 on the grounds that the budget document was too far along in the process to seek a correction. The correction was never made. In addition to the in-house research at CAMI, the FAA made available to OAM an additional \$700,000 for a longitudinal study by Boston University's Dr. Robert Rose on controller stress and illness. The FAA designated a Headquarters medical officer to help Dr. Rose to develop the contract for the proposed landmark study during the subsequent four-year period (1974-78), and the physician who was assigned to help develop this contract and to help Dr. Rose during the four-year period it was in force and monitored by the Office of Aviation Medicine was S.R. Mohler, M.D. That influx of those contract funds established a higher dollar base for the Office of Aviation Medicine's overall research programs. It also established the use of those types of funds by the Washington office so that some research projects came to be funded and monitored outside of CAMI.

The Rose study reflected one of the agency's thrusts to evaluate scientifically issues related to air traffic controller stress. Other research was being conducted at CAMI on related stress topics. Specifically, field studies of controller shift schedules and air traffic workload along with psychological assessments of anxiety, job attitudes, and interest patterns were completed.

In the late 1970's, an interesting option began to be considered by the FAA and the Department of Transportation. Specifically, there was a proposal to convert CAMI to a departmental function as the Transportation Biomedical Research Institute (TBRI). That proposal received considerable attention over a number of months and appeared to be favorably viewed at the highest levels of DOT. However, interest waned and the proposal was never acted upon.

In 1979, the FAA conducted an "early out" program to reduce staffing levels. A number of research staff took advantage of the opportunity to retire early and, as a

result, the authorized position levels were subsequently reduced from 97 to 90 (although actual staffing levels never approached these numbers, due, in major part, to the insufficiency of funding).

In the summer of 1981, a major event occurred in the history of the FAA and of U.S. labor law. The Professional Air Traffic Controllers Organization (PATCO) went on strike and refused to return to work at the order of U.S. President Ronald Reagan. President Reagan fired the striking controllers, and the FAA undertook a strike recovery program which included the unprecedented hiring and basic training of over 8,000 air traffic controller applicants in a 2-year period. CAMI played a key role in the recovery program.

As the need for an FAA recovery plan developed, the significant skills of CAMI scientists and their considerable knowledge about air traffic controller selection and training were recognized by then FAA Administrator J. Lynn Helms. A CAMI scientist, Dr. James O. Boone, was appointed to the Administrator's staff and moved to Washington Headquarters to assist in the strategic and operational recovery planning. Other scientists, led by Allan D. VanDeventer, took full charge of CAMI's controller selection research program and provided the local research leadership for the FAA Academy to help make strike recovery work; that included changing the ATC Screen program to make it more efficient with respect to success in Academy training. The importance of CAMI's contributions to strike recovery was underscored by Administrator Helms when he provided certificates of commendation and appreciation from Pan American World Airways dated May 6, 1982, to regional and center headquarters offices, air route traffic control centers, level IV and V terminals; level III Flight Service Stations, the FAA Academy—and to CAMI. The certificate recognized the "outstanding performance of FAA employees in maintaining a high level of safety and operations following the controller strike." Helms also noted in his August 2, 1982, memorandum that he believed that "this is the first time in the history of Pan American World Airways that the Board of Directors has authorized a commendation for a total organization."

As part of the strike recovery effort, following outcomes from contract studies of air traffic controllers (the "Jones Committee Report") and with support from CAMI psychologists, Administrator Helms requested that CAMI scientists develop a questionnaire to assess the FAA's organizational culture as a means of establishing a baseline to determine the effects of organizational interventions. That effort was designed to provide a base of information

that could help to prevent the type of impasse that led to the air traffic controller strike and firings. The first FAA Employee Survey was conducted in 1984 as a census of all FAA employees. It was a major undertaking. All aspects of the survey from development of the items, to printing, mailing, scoring, statistical analyses, and preparation of reports were conducted at CAMI under the direction of David J. Schroeder, Ph.D. The scannable survey form comprised 66 substantive items, was distributed to about 47,000 employees at their home addresses (a considered decision by agency management, reflecting some of the continuing concerns of that period), and yielded a 55% return rate. Although there had been considerable managerial anxiety about the conduct of this first agency-wide survey, and although the results showed a number of areas in need of improvement, the survey project was a highly successful one—it led to consideration by management of plans to improve aspects of the work environment, and identified successful policies. In support of the perceived value of the survey approach, the Administrator decided to continue use of the survey on a biennial basis.

A confluence of events during this time led to some later organizational changes involving both the research branch and the Institute as a whole. Specifically, in 1981 OAM had been moved by departing Administrator Langhorne M. Bond from reporting directly to his office and was organizationally placed under the Associate Administrator for Aviation Standards (AVS). In 1983, Walter S. Lufsey (AVS-1), at the request of FAA Administrator Helms, assigned a study of CAMI research to a staff member, William Smith, Ph.D., who had a background in physics. The so-called "Smith Report," formally released in 1984, presented a plan for modifying the CAMI research structure (removing some aeromedical areas from a research to an operations category), introduced the rather cumbersome term "workplace performance optimization"—to cover selection, training, and survey studies—as an area of acceptable research along with "protection and survival" and "workload and performance", emphasized the need for research sponsorship by an operational agency element, and led AVS-1 to recommend that the Institute be re-aligned under the Associate Administrator for Development and Logistics (ADL-1), noting that CAMI's Aeromedical Research Branch was receiving executive direction from the Aeronautical Center, programmatic direction from the Federal Air Surgeon

(under AVS), and was funded from research budgets managed by ADL. The "workplace performance optimization" category survived for about a decade while the enhanced sponsorship recommendation was addressed and developed in future years. However, CAMI's basic research structure stayed intact. Meanwhile, the strike, the successful recovery efforts, and the successful survey project emphasized the need by the agency to direct more attention to its human resources. In that regard, CAMI psychologists had provided leadership and accomplishments significant enough by 1984 to lead agency executives, particularly the highly respected Associate Administrator for Administration, Mr. Gene Weithoner, to seek actively to assure a more prominent role for that group in the organization. The Aeronautical Center Director, Mr. Benjamin Demps, strongly supported the enhancement of human resources research (he had also had very positive first-hand experience with CAMI psychologists when he had served as Superintendent of the FAA Academy). Mr. Demps developed a chronology of CARI/CAMI organizational events and a position paper in 1984 for the FAA Administrator, drafted by K. A. Hayes, to establish a Human Resources Research Institute at the Aeronautical Center by converting the Aviation Psychology Laboratory to that role. (A similar, less formalized attempt to effect the same type of result was generated among the human resources offices in Washington Headquarters in late 1988). However, no immediate action was taken on those initiatives.

*Postscript:* The major outcome of the 1984 organizational suggestions was the 1986 decision and the January 1987 conversion of the Aviation Psychology Laboratory within the Aeromedical Research Branch to its own branch status as the Human Resources Research Branch. Moreover, in a determination order by Brooks Goldman, Associate Administrator for Administration, dated May 30, 1986, CAMI was formally transferred back under the Office of Aviation Medicine and became a tenant organization at the Aeronautical Center—the position it had originally held from 1960-1965. (That order also acknowledged the "loan" by the Aeronautical Center of aeromedical clinical resources.) In December 1988, all of the CAMI branches were elevated to division status with the Aeromedical Clinical Branch renamed the Occupational Health Division. These organizational changes remained effective through the year 2000.

### **Additional References**

Other CARI/CAMI historical vignettes appear immediately following this article and as prefaces in previous Index reports, viz, FAA Report Nos. DOT/FAA/AM87-1, DOT/FAA/AM97-1, and DOT/FAA/AM98-1.



## A BRIEF HISTORY OF OAM RESEARCH FUNDING, STAFFING, AND TECHNICAL REPORT PRODUCTION

W.E. Collins, Ph.D. and Gale G. Dills

With the establishment of the Civil Aeromedical Research Institute (CARI) in 1960, research staffing, funding, and the production of technical reports by the Office of Aviation Medicine (OAM) were initially centered in CARI. Indeed, the first three years of research publications (1961-63) were termed CARI reports. The use of the OAM logo and the like change in the designation of those reports began in 1964. Research funding also was tied to CARI/CAMI during the 1960s; later, Washington Headquarters retained funds designated as contract dollars and issued and monitored contracts in such areas as air traffic controller (ATC) selection, aspects of air piracy research, ATC color vision, aspects of aircraft maintenance, and others over the years. The discrepancies between CARI/CAMI funding and overall Office of Aviation Medicine research funding is largely accounted for by the allocation and use of contract dollars from Washington Headquarters. CAMI has always been primarily a hands-on conductor of research and had relatively little or no annually contracted research until the 1990s. During that decade, an expansion of the vision for CAMI research and a concomitant increase in resources – both personnel and dollars – led to an enhanced approach to contracting and, for the first time in 1993, to awarding research grants in support of internal programmatic goals.

Nevertheless, the first two contracted studies by CARI/CAMI were initiated early in its history, at about the same time, and resulted in final reports in October and November 1964. One of these, not surprisingly, dealt with air traffic controllers (Investigation of the Training-Performance Criteria for Several Federal Aviation Agency Occupational Specialties by M. Clinton Miller III, Department of Preventive Medicine and Public Health, University of Oklahoma Medical Center); the other (Vestibular Investigations in Mammals by R.D. Burns, Ph.D., University of Oklahoma, University of Oklahoma Research Institute, June 1962-July 1964) had the added benefit of providing CARI/CAMI with a model RS-2 Stille-LKB rotating chair for vestibular stimulation. The Stille device was employed extensively for decades as a research tool and to demonstrate aspects of spatial disorientation; it later became the basis for commercially produced disorientation trainers, and, to date, is still operable and used as needed.

Figures 1 and 2 show the history of appropriations and authorized positions for the OAM and for CARI/CAMI, respectively. Because the Institute always received the major share of the appropriations, the time course of dollar support in both graphs is similar and, during the 1960s, was veridical.

A similar situation is evident in the position allocation data in both curves with the exception of 1965 and 1986-88. The former case represented a peculiar drop from 100 to 79 as part of the agency order that changed CARI to CAMI; the level reverted back to 100 the following year. Except for 1965 and the 1986-88 period, during which three positions were moved from CAMI to the Washington office, all the research positions were nominally located in Oklahoma City. The displacement of those three positions was effected by Federal Air Surgeon Frank Austin, M.D., who used them to support the Headquarters OAM staff that was monitoring contract research. The positions were returned to CAMI in 1990.

Aeromedical research positions moved up from 62 in 1962 to a 100-level ceiling beginning in 1963, shortly after Stanley R. Mohler, M.D., had become CARI Director. The ceiling of 100 had been set initially by Mr. Albert Thomas' Congressional appropriations committee and was never exceeded. In 1965, the level dropped to 79 as part of the order when CARI was reorganized as CAMI, but rose back to 100 in 1966 when positions at the defunct Georgetown Clinical Research Institute were transferred to CAMI. In 1974, the level dropped to 97 – allegedly on the basis of an error by the agency budget office at Washington Headquarters that was never corrected. Somewhat ironically, OAM research funding increased at about the same time due, in part, to agency support of the so-called "Rose Study" of air traffic controllers.

Overall OAM funding showed a modest linear increase from 1970-1978 and then leveled off for 5 years, but CAMI research dollars remained level over the same



*Dr. S.R. Mohler  
(c. 1962)*

# FAA Aviation Medical Research (1962-2000)

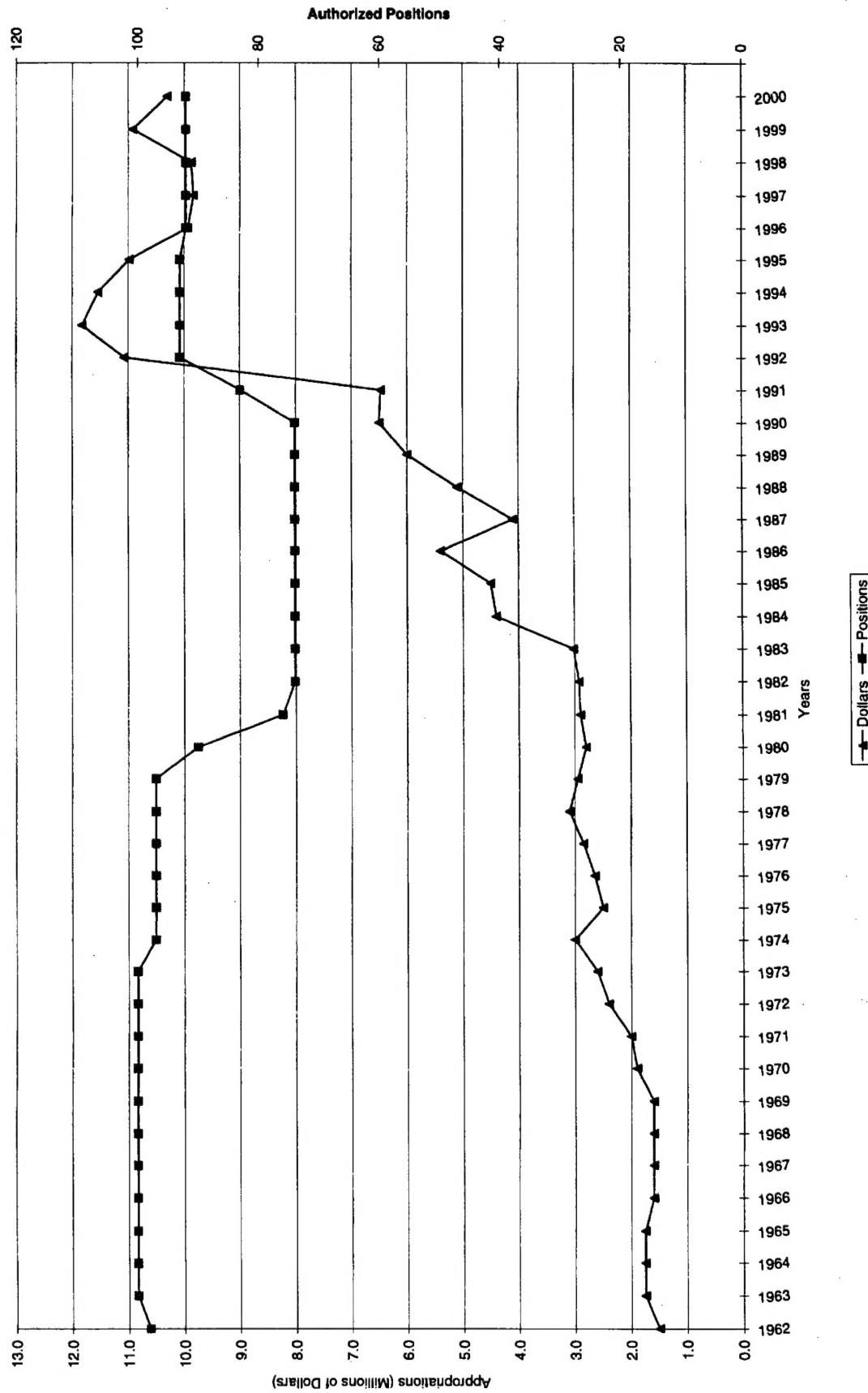


Figure 1. History of appropriations for the Office of Aviation Medicine: 1961-2000.

# Civil Aeromedical Institute Research (1961-2000)

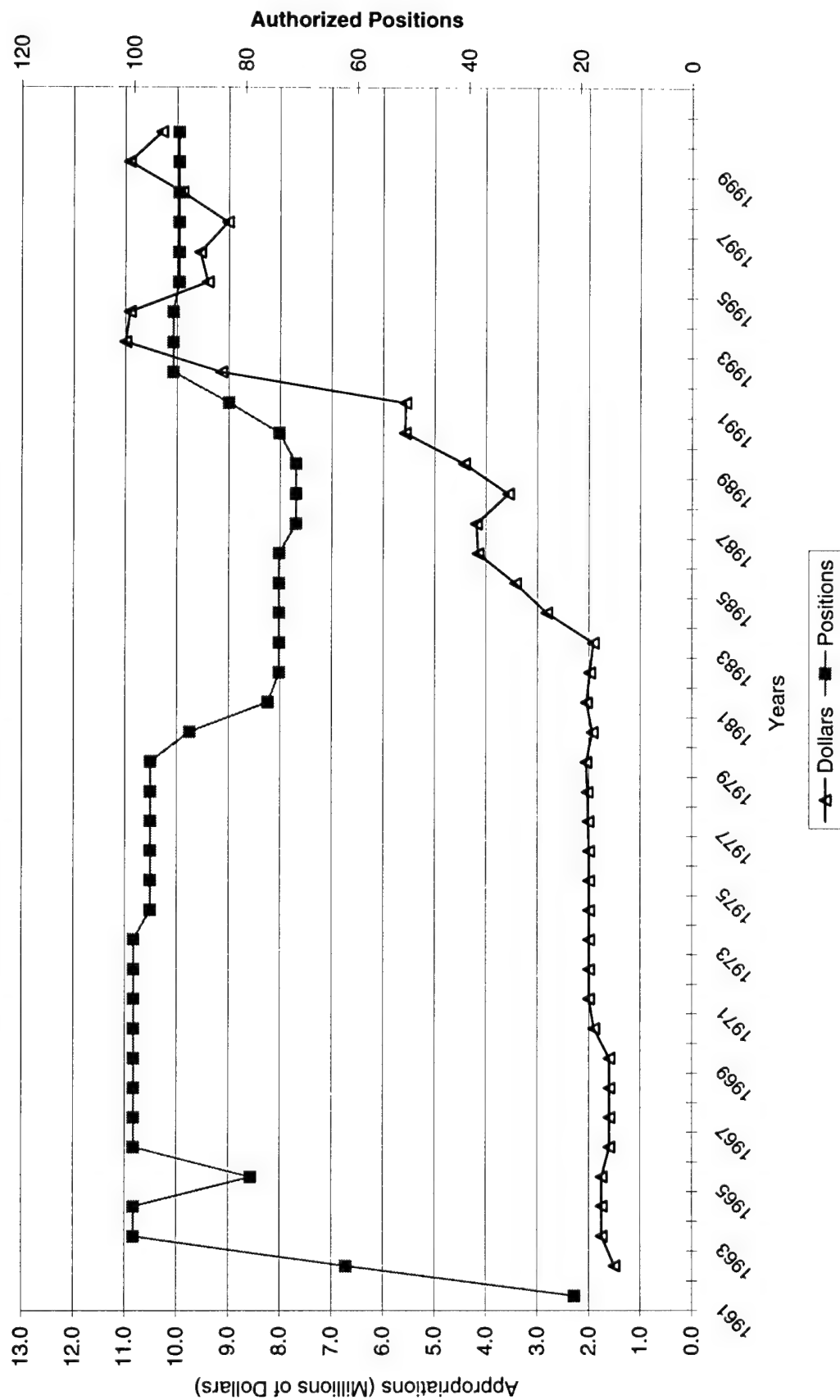


Figure 2. History of appropriations for the Civil Aeromedical Institute: 1961-2000.

# OAM Reports Production: 1961 - 2000

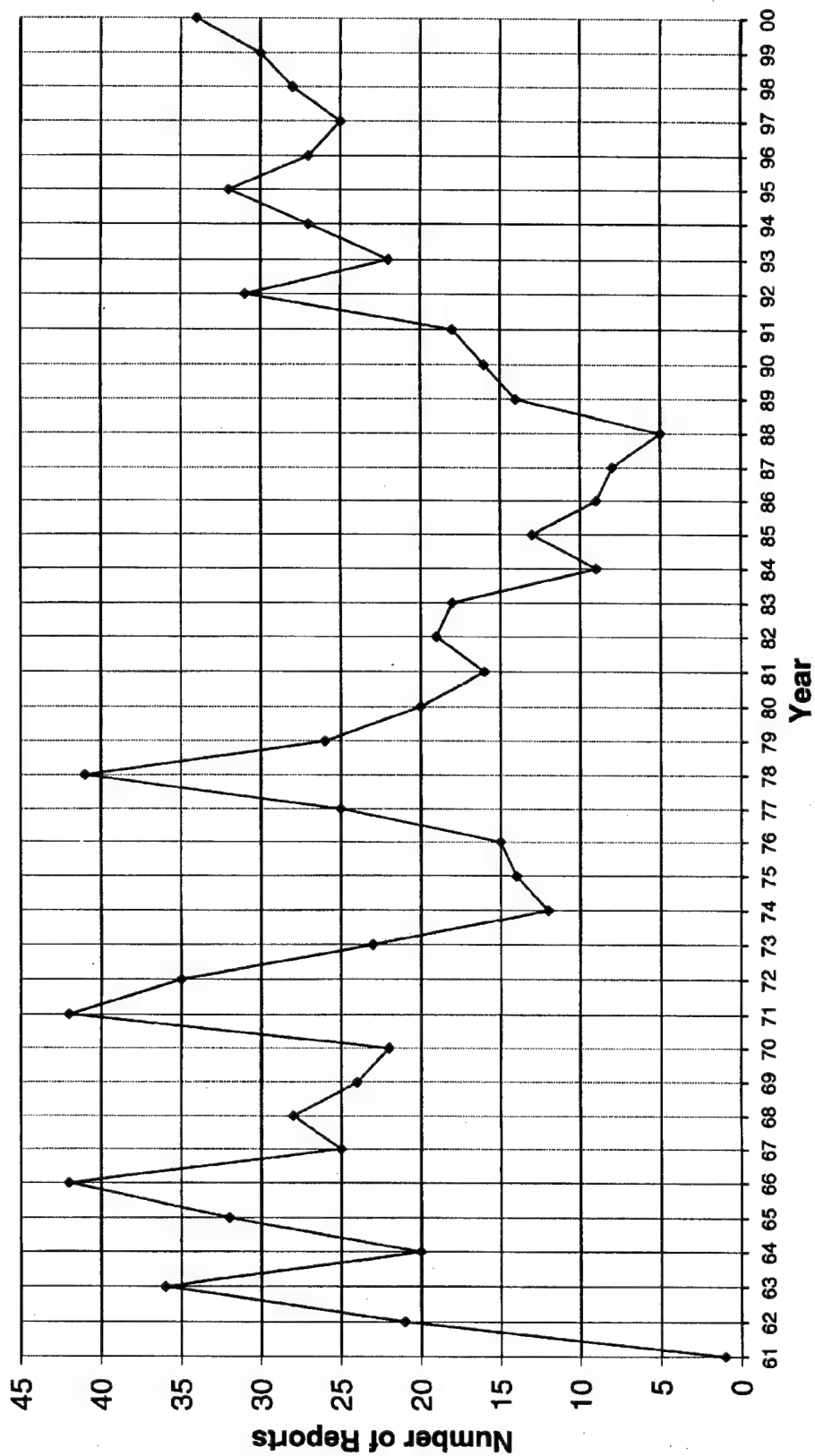


Figure 3. Office of Aviation Medicine Technical Reports: By Year, 1961-2000.



time period. During the 1978-83 period, the number of authorized positions fell on three occasions. The first (1980) was related to an "early out" program conducted by the agency and reduced the authorized number to 90 positions. Subsequent reductions occurred in 1981 (to 76 positions) and 1982, leveling off at 74 positions. Also, during this period, a change occurred in the allocation of positions. While previously (and subsequently) all positions were RE&D (i.e., Research, Engineering, and Development), during 1975-1983 from 58 to 77 of the positions were FE&D (Facilities, Equipment, and Development) slots; the remaining 16-20 positions were designated as RE&D. Those variations reflected Washington budget office decisions related to much larger FE&D and RE&D issues. Partly as a result of the increased emphases related to the controller strike, strike recovery, the Employee Attitude Survey, and a new look at selecting and training controllers (along with the diminishing amounts of research resources after CAMI personnel costs were deducted), some increase in OAM funding occurred from 1984-1986, a major part of which was assigned to the Institute.

J. Robert Dille, M.D., who had served as CAMI Director since 1965, retired at the end of 1987. Following several months of rotating acting CAMI managers, William E. Collins, Ph.D., was appointed deputy manager (the term "Director" was temporarily not used because agency officials had come to feel it conflicted with the titles of FAA regional and center directors – it was later restored) in 1988 and CAMI Director in 1989. During that time negotiations to return the three CAMI research positions that had been relocated to the Washington office in 1987 were successful; the positions were reallocated to CAMI in 1990 by Federal Air Surgeon Robert R. McMeekin, M.D. Although the Institute had 74 authorized research positions, by 1988 only 57 full-time permanent personnel were on board and CAMI's research funding was not adequate for a larger base of personnel. It should be noted that CAMI had never been fully staffed, based jointly on the restricted funding issues and on the budgetary application of a limiting number of FTEs (full time equivalent) for staffing levels; those FTEs were always below the position levels. Given the approximate 2-year lag in the normal budget process, an immediate concerted effort to

negotiate an improvement in resources was needed at every level (Agency, Department, Office of Management and Budget (OMB), and the Congress). Those efforts were successfully undertaken and resulted in significant increases in both positions and dollars. Positions jumped from 74 to 83 in 1991 and then to 93 in 1992. Funding went from less than \$4 million in 1987-88 to over \$5 million in 1990 to more than \$11 million in 1993.

It is perhaps of some interest that these staffing increases were almost topped during the 1993 budget process. At that time CAMI had successfully requested 5 more positions - uniquely the Agency was requesting no others - and had seen them retained during the first FAA-DOT-OMB pass through of the budget (although no new funding was being requested). The positions survived the final FAA cut but were dropped during the final DOT pass through by Admiral James B. Busey who had served as the FAA Administrator from 1989 - 1991 and had moved from there to a DOT position. The grounds reported for removing the 5 positions at that stage were that no new air traffic control or safety positions were

being requested in the budget, and no funding for the 5 CAMI positions was in the budget. The OAM-CAMI position level stayed at 93.

Throughout the first three decades of CARI/CAMI research, budgets were submitted through the Office of the Federal (nee Civil) Air Surgeon, and funding was provided to that office and distributed to the Institute.

Aviation Medicine was a research budget line. By 1989, however, as part of a response to industry/professional organization/advisory group recommendations, the agency initiated a "human factors" research emphasis that included the hiring of a scientific and technical advisor for human factors. The appointee, Clay Foushee, Ph.D., began to develop a human factors research plan and to work with the agency budget officials. The agency research budget was divided into chapters and the new human factors thrust was assigned to Chapter 8. There was considerable interaction in the budget meetings regarding the title for Chapter 8 – Dr. Foushee and some others preferred "Human Factors" as the title to subsume aviation medicine, aspects of research at the FAA Technical Center (particularly with respect to air traffic controllers), and Washington-based research contracts in



**Dr. J. Robert Dille**  
(c. 1963)



**Dr. W.E. Collins**  
(c. 1965)

various human factors areas. However, perseverance by aviation medicine in these budget meetings led finally to titling Chapter 8 as "Human Factors and Aviation Medicine" – an accomplishment largely attributable to the on-site work of William T. Shepherd, Ph.D., an OAM-based psychologist. The importance of maintaining the identity of aviation medicine research in this instance, and in a later instance regarding logos, transcends any purely nominal issues. Because the agency is largely geared to, and staffed in, regulatory, engineering, and development areas, the unique person-oriented research approach that typifies the OAM research programs needs to be imbedded in a similarly oriented office if it is to maintain its human-centered thrust. This perhaps not-so-apparent need manifested itself clearly as early as 1991 when the first budget-line "program managers" for the new Chapter 8 expressed strong interest in discontinuing support of various productive human performance research programs at CAMI in favor of engineering-related projects. That approach disappeared with the assignment of new "program managers" with broader agency and research perspectives.

The funding mechanisms subsequently changed. Dr. Foushee developed an office and a staff within the agency's aviation research organization and by 1992 CAMI was being funded directly from the research budget office while the contract research being conducted from the Office of Aviation Medicine was given separate funds. In 1995, the latter transfer of funds ceased and, while aviation medicine's contract research from the Washington office continued with the small staff there, funding was drawn from the Office of Aviation Research (AAR) and not allocated to OAM. In 1997, a similar change was attempted for CAMI funding but a case was vigorously and successfully made to allocate immediately to CAMI each year's funding for all "in-house" costs (i.e., everything except contracts and grants for research by outside organizations) and to follow-up during the first quarter of the year (beginning in FY-98) with CAMI's contract research/grants funding. In 1996, the Congressional appropriation for all of FAA's RE&D funding changed, without notice, from a "no-year appropriation" to a "3-year appropriation."

CAMI's research productivity is largely defined by its output of technical reports. Indeed, it is probably the best indicator of its published (or public) research

results. Such a measure, while of singular importance, represents only part of the value derived from its research program. CAMI researchers also publish in scientific journals, make scientific presentations at national and international meetings, give safety lectures, provide data and knowledge for educational purposes, and serve as agency, department, national, and international consultants in their areas of expertise. However, as is evident from Figure 3, productivity as measured by technical reports was highly variable irrespective of funding levels during the first two decades. The peak in 1978 is partly attributable to some extra efforts to complete projects before a 1979 "early out" program by the agency to reduce overall staffing levels. From that peak, however, two clear trends emerged. Productivity dropped steadily from 1978 to 1988 to a low of 5 reports; it then increased steadily to an average of about 28 per year during the later half of the 1990's. It is perhaps of some interest that in 1995, AAR developed a logo and initiated an undertaking to use that logo on OAM reports – first in place of the OAM logo, later along with it. Pursuit of both alternatives was discontinued after several months of intermittent discussions to insure the integrity of the medical programs.

The position gains (to 93) were later tempered when the agency introduced a "buy out" program in 1994 (along with a required change in the ratio of employees to supervisors/managers – to reduce the size of the supervisory staff) as part of U.S. Vice President Gore's goal to reduce the size of government. As a result, the agency's overall research program was required to reduce its number of authorized positions and restrict filling the remaining positions by seven positions per year for the following three years. CAMI was able to retain 92 authorized positions (an initial determination to set the level at 88, based on prior-year vacancies, was successfully changed), and the allowed employment level (staffing ceiling) settled at 89 in meeting these agency goals. Those levels were maintained through the year 2000.

Similarly, the peak funding levels achieved by CAMI in 1993 and 1994 were affected following the 1994 "buyout" by reductions in 1995 – 1997; a return to those peak levels began in 1998 and was sustained in years 1999 and 2000.

*The data in this report were derived from analyses and resolution of budgetary documents and memoranda initiated at the Aeronautical Center, OAM, and CARI/CAMI.*

## HOW TO USE THE INDEX

The Index is organized in three sections:

1. **Chronological Index:** A cumulative list of all research reports from 1961 through 2000.
2. **Author Index:** An index of authors, in alphabetical order.
3. **Subject Index:** An index of subjects, listed in alphabetical order.

Some examples are:

00-19 Nakagawara, V.B., Wood, K.J., and Montgomery, R.W: Refractive surgery in aircrew members who fly for scheduled and non-scheduled civilian airlines.

Above: This is an entry from the **Chronological Index** of research reports, shown in cumulative sequence.

Bailey, L.L. 96-24, 98-24, 99-17, 99-24, 99-25, 99-27, 00-14, 00-17, 00-25, 00-28.

Left: This is an entry from the **Author Index**, which lists all of the research reports prepared by an author or co-author.

### Accidents

... age of pilots, 77-10.  
... agricultural aircraft, 66-27, 66-30, 72-15, 78-31, 80-3.  
... alcohol involved, 66-29, 68-16, 78-31, 80-4, 92-24, 98-5, 00-21.  
... analyses of injuries, 70-16, 71-3, 72-15, 81-10, 82-7.

Left: An example of entries in the **Subject Index**; refers to all reports that pertain to a specific topic.

## REPORT NUMBERS

98-23 Broach, D. (Editor): Recovery of the FAA Air Traffic Control specialist workforce, 1981-1992. ADA355135

Above: The first numbers (98-23) refer to the year and chronological number of the report. This is an abbreviated portion of the official number given each report and is found in the upper left of the report's cover page. The full report number of "98-23" is DOT/FAA/AM-98/23. The "ADA355135" is the number appended to the report by the National Technical Information Service. Keep the number system in mind when ordering.

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- 74-3 Collins, W. E: Adaptation to vestibular disorientation. XII. Habituation of vestibular responses: an overview. AD780562
- 74-4 Young, J. W., Fisher, R. G., Price, G. T., and Chandler, R. F: Experimental trauma of occipital impacts. AD780668
- 74-5 Booze, C. F., Jr: Characteristics of medically disqualified airman applicants during calendar year 1971. AD781684
- 74-6 Lategola, M. T., and Layne, P. J: Amplitude/frequency differences in a supine resting single-lead electrocardiogram of normal versus coronary heart diseased males. AD781685
- 74-7 Mathews, J. J., Collins, W. E., and Cobb, B. B., Jr: Job-related attitudes of nonjourneyman FAA air traffic controllers and former controllers: a sex comparison. AD787238
- 74-8 Cobb, B. B., Jr., and Nelson, P. L: Aircraft-pilot and other pre-employment experience as factors in the selection of air traffic controller trainees. ADA001039
- 74-9 Thackray, R. I., Touchstone, R. M., and Bailey, J. P: Behavioral, autonomic, and subjective reactions to low- and moderate-level sonic booms: A report of two experiments and a general evaluation of sonic boom startle effects. ADA002266
- 74-10 Chiles, W. D., and West, G: Multiple-task performance as a predictor of the potential of air traffic controller trainees: A followup study. ADA002920
- 74-11 Melton, C. E., Jr., McKenzie, J. M., Saldivar, J. T., and Hoffmann, S. M: Comparison of Opa Locka Tower with other ATC facilities by means of a biochemical stress index. ADA008378
- 74-12 Smith, R. C: A realistic view of the people in air traffic control. ADA006789
- 1975
- 75-1 Jones, K. N., Steen, J. A., and Collins, W. E: Predictive validities of several clinical color vision tests for aviation signal light gun performance. ADA006792
- 75-2 Snow, C. C., Reynolds, H. M., and Allgood, M. A: Anthropometry of airline stewardesses. ADA012965
- 75-3 Mathews, J. J., Cobb, B. B., Jr., and Collins, W. E: Attitudes on en route air traffic control training and work: A comparison of recruits initially trained at the FAA Academy and recruits initially trained at assigned centers. ADA013343

- 75-4 Collins, W. E., Lennon, A. O., and Grimm, E. J: The use of vestibular tests in civil aviation medical examinations: Survey of practices and proposals by aviation medical examiners. ADA015087
- 75-5 Ryan, L. C., Gerathewohl, S. J., Mohler, S. R., and Booze, C. F., Jr: To see or not to see: Visual acuity of pilots involved in midair collisions. ADA016277
- 75-6 Lewis, M. F., Ferraro, D. P., Mertens, H. W., and Steen, J. A: Interaction between marihuana and altitude on a complex behavioral task in baboons. ADA020680/5GI
- 75-7 Melton, C. E., Jr, Smith, R. C., McKenzie, J. M., Saldivar, J. T., Hoffmann, S. M., and Fowler, P. R: Stress in air traffic controllers: Comparison of two air route traffic control centers on different shift rotation patterns. ADA020679/7GI
- 75-8 Thackray, R. I., Bailey, J. P., and Touchstone, R. M: Physiological, subjective, and performance correlates of reported boredom and monotony while performing a simulated radar control task. ADA025426/8GI
- 75-9 Smith, R. C., Rana, B., and Taylor, D. K: An evaluation of the effectiveness of the FAA Management Training School. ADA025254/4GI
- 75-10 Higgins, E. A., Chiles, W. D., McKenzie, J. M., Iampietro, P. F., Winget, C. M., Funkhouser, G. E., Burr, M. J., Vaughan, J. A., and Jennings, A. E: The effects of a 12-hour shift in the wake-sleep cycle on the physiological and biochemical responses and on multiple-task performance. ADA021518/GGI
- 75-11 Tobias, J. V: Earplug ratings based on the protector-attenuation rating (P-AR). ADA024756/9GI
- 75-12 Hasbrook, A. H., Rasmussen, P. G., and Willis, D. M: Pilot performance and heart rate during in-flight use of a compact instrument display. ADA021519/4GI
- 75-13 Reynolds, H. M., and Allgood, M. A: Functional strength of commercial-airline stewardesses. ADA021836/2GI
- 75-14 Higgins, E. A., Chiles, W. D., McKenzie, J. M., Iampietro, P. F., Vaughan, J. A., Funkhouser, G. E., Burr, M. J., Jennings, A. E., and West, G: The effects of dextroamphetamine on physiological responses and complex performance during sleep loss. ADA021520/2GI
- 1976
- 76-1 Jennings, A. E., and Chiles, W. D: An investigation of time-sharing ability as a factor in complex performance. ADA031881/GGA
- 76-2 Smith, R. C., and Melton, C. E: Effects of ground trainer use on the psychological and physiological states of students in private pilot training. ADA024704/9GI
- 76-3 Tobias, J. V: Massed versus distributed practice in learned improvement of speech intelligibility. ADA024705/GGI
- 76-4 Constant, G. N., Grimm, E. J., Goulden, D. R., and Murcko, L. E: Aviation medicine translations: Annotated bibliography of recently translated material. IX. ADA031492/2GA
- 76-5 Vaughan, J. A., and Welsh, K. W: Visual evaluation of smoke-protective devices. ADA031493/0GI
- 76-6 Cobb, B. B., Jr., Young, C. L., and Rizzuti, B. L: Education as a factor in the selection of air traffic controller trainees. ADA031880/8GI
- 76-7 Dille, J. R., and Booze, C. F., Jr: Accident experience of civilian pilots with static physical defects. ADA029431/4GI

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- 76-8 Reighard, H. L: Aviation medicine. ADA032558/9GI
- 76-9 Young, J. W., Reynolds, H. M., McConville, J. T., Snyder, R. G., and Chandler, R. F: Development and evaluation of masterbody forms for 3- and 6-year-old-child dummies. ADA037547/7GI
- 76-10 Dark, S. J: Characteristics of medically disqualified airman applicants in calendar years 1973 and 1974. ADA032603/3GI
- 76-11 Higgins, E. A., Chiles, W. D., McKenzie, J. M., Funkhouser, G. E., Burr, M. J., Jennings, A. E., and Vaughan, J. A: Physiological, biochemical, and multiple-task-performance responses to different alterations of the wake-sleep cycle. ADA033889/7GI
- 76-12 Collins, W. E: Some effects of sleep deprivation on tracking performance in static and dynamic environments. ADA033331/0GI
- 76-13 Melton, C. E., Jr., Smith, R. C., McKenzie, J. M., Hoffmann, S. M., and Saldivar, J. T: Stress in air traffic controllers: Effects of ARTS-III. ADA034752/GGI
- 76-14 Lentz, J. M., and Collins, W. E: Three studies of motion sickness susceptibility. ADA036284/8GI
- 76-15 McKenzie, J. M: The aeromedical significance of sickle-cell trait. ADA038466/9GI
- 1977
- 77-1 Murcko, L. E., and Dille, J. R: Index to FAA Office of Aviation Medicine Reports: 1961 through 1976. ADA037234/2GI
- 77-2 Welsh, K. W., Vaughan, J. A., and Rasmussen, P. G: Survey of cockpit visual problems of senior pilots. ADA037587/3GI
- 77-3 Lategola, M. T., Flux, M., and Lyne, P. J: Spirometric assessment of potential respiratory impairment in general aviation airmen. ADA038296/0
- 77-4 Valdez, C. D: Ten-year survey of altitude chamber reactions using the FAA training chamber flight profiles. ADA03723/9GI
- 77-5 Saldivar, J. T., Hoffmann, S. M., and Melton, C. E: Sleep in air traffic controllers. ADA038297/8GI
- 77-6 Gerathewohl, S. J: Psychophysiological effects of aging: Developing a functional age index for pilots: I. A survey of the pertinent literature. ADA04032/0GI
- 77-7 Welsh, K. W., Rasmussen, P. G., and Vaughan, J. A: Intermediate visual acuity of presbyopic individuals with and without distance and bifocal lens corrections. ADA038538/5GI
- 77-8 Hanneman, G. D., Higgins, E. A., Price, G. T., Funkhouser, G. E., Grape, P. M., and Snyder, L: A study of effects of hyperthermia on large, short-haired male dogs: A simulated air transport environmental stress. ADA040432/7GI
- 77-9 Crane, C. R., Sanders, D. C., Endecott, B. R., Abbott, J. K., and Smith, P. W: Inhalation toxicology: I. Design of a small-animal test system. II. Determination of the relative toxic hazards of 75 aircraft cabin materials. ADA043646/9GI
- 77-10 Booze, C. F., Jr: An epidemiologic investigation of occupation, age, and exposure in general aviation accidents. ADA040978/9GI



- 77-11 Blethrow, J. G., Garner, J. D., Lowrey, D. L., Busby, D. E., and Chandler, R. F: Emergency escape of handicapped air travelers. ADA043269/0GI
- 77-12 Mertens, H. W: Perceived orientation of a runway model in nonpilots during simulated night approaches to landing. ADA044553/GGI
- 77-13 Welsh, K. W., Rasmussen, P. G., and Vaughan, J. A: Readability of alphanumeric characters having various contrast levels as a function of age and illumination mode. ADA044554/4GI
- 77-14 Welsh, K. W., Rasmussen, P. G., and Vaughan, J. A: Refractive error characteristics of early and advanced presbyopic individuals. ADA044555/1GI
- 77-15 Chiles, W. D: Objective methods for developing indices of pilot workload. ADA044556/9GI
- 77-16 Lategola, M. T., Flux, M., and Lyne, P. J: Altitude tolerance of general aviation pilots with normal or partially impaired spirometric function. ADA044557/7GI
- 77-17 Higgins, E. A., Chiles, W. D., McKenzie, J. M., Davis, A. W., Jr., Funkhouser, G. E., Jennings, A. E., Mullen, S. R., and Fowler, P. R: Effects of lithium carbonate on performance and biomedical functions. ADA044824/1GI
- 77-18 Thackray, R. I., Bailey, J. P., and Touchstone, R. M: The effect of increased monitoring load on vigilance performance using a simulated radar display. ADA044558/5GI
- 77-19 Smith, P. W., Robinson, C. P., Zelenski, J. D., and Endecott, B. R: The role of monamine oxidase inhibition in the acute toxicity of chlordimeform. ADA045507/1GI
- 77-20 Dille, J. R., and Booze, C. F: The 1975 accident experience of civilian pilots with static physical defects. ADA045429/8GI
- 77-21 Smith, R. C., and Hutto, G. L: Job attitudes of airway facilities personnel. ADA04641/3GI
- 77-22 Revzin, A. M: Functional localization in the nucleus rotundus. ADA047717/4GI
- 77-23 Melton, C. E., Smith, R. C., McKenzie, J. M., Wicks, S. M., and Saldivar, J. T: Stress in air traffic personnel: Low-density towers and flight service stations. ADA046826/4GI
- 77-24 Collins, W. E., Hasbrook, A. H., Lennon, A. O., and Gay, D. J: Disorientation training in FAA-certificated flight and ground schools: a survey. ADA047718/2GI
- 77-25 Dailey, J. T., and Pickrel, E. W: Development of new selection tests for air traffic controllers. ADA049049/0GI
- 1978**
- 78-1 McFadden, E. B. (Ed.): Flotation and survival equipment studies. ADA051869/GGI
- 78-2 Revzin, A. M: Effects of ethanol on visual unit activity in the thalamus. ADA05092/4GI
- 78-3 Pollard, D. W., Garner, J. D., Blethrow, J. G., and Lowrey, D. L: Passenger flow rates between compartments: Straight-segmented stairways, spiral stairways, and passageways with restricted vision and changes of attitude. ADA05148/1GI
- 78-4 deSteiguer, D., Pinski, M. S., Bannister, J. R., and McFadden, E. B: Aircrew and passenger protective breathing equipment studies. ADA05100/4GI

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---

- 78-5 Higgins, E. A., Lategola, M. T., and Melton, C. E: Three reports relevant to stress in aviation personnel. ADA051690/GGI
- 78-6 Chandler, R. F., and Trout, E. M: Evaluation of seating and restraint systems and anthropomorphic dummies conducted during fiscal year 1976. ADA051691/4GI
- 78-7 Lewis, M. A: Use of the occupational knowledge test to assign extra credit in selection of air traffic controllers. ADA05367/5GI
- 78-8 Friedberg, W., Neas, B. R., Faulkner, D. N., Hanneman, G. D., and Darden, E. B., Jr: Radiobiological aspects of high altitude flight: Relative biological effectiveness of fast neutrons in suppressing immune capacity to an infective agent. ADA05320/4GI
- 78-9 McFadden, E. B: Human respiratory considerations for civil transport aircraft system. ADA053223/4GI
- 78-10 Boone, J. O: The relationship of predevelopmental "150" training with noncompetitively selected air traffic control trainees to FAA Academy success. ADA055009/5GI
- 78-11 Thackray, R. I., Touchstone, R. M., and Bailey, J. P: A comparison of the vigilance performance of men and women using a simulated radar task. ADA053674/8GI
- 78-12 Chandler, R. F., and Trout, E. M: Child restraint systems for civil aircraft. ADA053565/8GI
- 78-13 Kirkham, W. R., Collins, W. E., Grape, P. M., Simpson, J. M., and Wallace, T. F: Spatial disorientation in general aviation accidents. ADA053230/9GI
- 78-14 Young, J. W., and Pinski, M. S: Three-dimensional anthropometry of the adult face. ADA054938/GGI
- 78-15 Mertens, H. W: Comparison of the visual perception of a runway model in pilots and nonpilots during simulated night landing approaches. ADA054450/2GI
- 78-16 Gerathewohl, S. J: Psychophysiological effects of aging: Developing a functional age index for pilots: II. Taxonomy of psychological factors. ADA054356/1GI
- 78-17 Rasmussen, P. G., Welsh, K. W., and Vaughan, J. A: Comparative readability of enroute low altitude charts with and without terrain depiction. ADA054796/8GI
- 78-18 Melton, C. E., McKenzie, J. M., Saldivar, J. T., and Wicks, S. M: Experimental attempts to evoke a differential response to different stressors. ADA054795/0GI
- 78-19 Higgins, E. A., Chiles, W. D., McKenzie, J. M., Jennings, A. E., Funkhouser, G. E., and Mullen, S. R: The effects of altitude and two decongestant-antihistamine preparations on physiological functions and performance. ADA054793/5GI
- 78-20 Lategola, M. T., Davis, A. W., Jr., Lyne, P. J., and Burr, M. J: Cardiorespiratory assessment of decongestant-antihistamine effects on altitude, +Gz, and fatigue tolerances. ADA055089/7GI
- 78-21 Booze, C. F: The morbidity experience of air traffic control personnel, 1967-1977. ADA056053/26I
- 78-22 Welsh, K. W., Vaughan, J. A., and Rasmussen, P. G: Aeromedical implications of the X-Chrom lens for improving color vision deficiencies. ADA054794/3GI
- 78-23 Garner, J. D., Chandler, R. F., and Cook, E. A: GPSS computer simulation of aircraft passenger emergency evacuations. ADA056098/7GI

- 78-24 Chandler, R. F., and Trout, E. M: Evaluation of seating and restraint systems and anthropomorphic dummies conducted during fiscal year 1977. ADA056905/3GI
- 78-25 Dark, S. J., and Davis, A. W., Jr: Characteristics of medically disqualified airman applicants in calendar years 1975 and 1976. ADA058158/7GI
- 78-26 Robinson, C. P., Beiergrohslin, D., Smith, P. W., and Crane, C. R: Reactions of methamidophos with mammalian cholinesterases. ADA058683/4GI
- 78-27 Gerathewohl, S. J: Psychophysiological effects of aging: Developing a functional age index for pilots: III. Measurement of pilot performance. ADA062501/2GA
- 78-28 Welsh, K. W., Rasmussen, P. G., and Vaughan, J. A: Visual performance assessment through clear and sunscreen-treated windows. ADA059750/0GA
- 78-29 Welsh, K. W., Vaughan, J. A., and Rasmussen, P. G: Conspicuity assessment of selected propeller and tail rotor paint schemes. ADA061875/1GA
- 78-30 McKenzie, J. M: Assessment of factors possibly contributing to the susceptibility of sickle trait erythrocytes to mild hypoxia. ADA056200/9GI
- 78-31 Lacefield, D. J., Roberts, P. A., and Blossom, C. W: Agricultural aviation versus other general aviation: Toxicological findings in fatal accidents. ADA060110/4GA
- 78-32 Smith, R. C: As evaluation of four MTS recurrent training courses. ADA061519/5GA
- 78-33 Chiles, W. D., and Jennings, A. E: Time-sharing ability in complex performance: An expanded replication. ADA061879/3GA
- 78-34 Chiles, W. D., Jennings, A. E., and Alluisi, E. A: The measurement and scaling of workload in complex performance. ADA061725/8GA
- 78-35 Reighard, H. L., and Dailey, J. T: Task force deterrence of air piracy—final report. ADA076457/1
- 78-36 Boone, J. O., and Lewis, M. A: The development of the ATC selection battery: A new procedure to make maximum use of available information when correcting correlations for restriction in range due to selection. ADA066131/2GA
- 78-37 Jennings, A. E: A method to evaluate performance reliability of individual subjects in laboratory research applied to work settings. ADA063731/4GA
- 78-38 Eighth Bethesda Conference of the American College of Cardiology, Washington, D.C., April 25-26, 1975: Cardiovascular problems associated with aviation safety. ADA066184/3GA
- 78-39 Rose, R. M., Jenkins, C. D., and Hurst, M. W: Air traffic controller health change study. Boston University School of Medicine. ADA063709/0GA
- 78-40 Melton, C. E., McKenzie, J. M., Wicks, S. M., and Saldivar, J. T: Stress in air traffic controllers: A restudy of 32 controllers 5 to 9 years later. ADA065767/6GA
- 78-41 Vaughan, J. A., Welsh, K. W., and Rasmussen, P. G: The optical properties of smoke-protective devices. ADA064678/6GA

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- 79-1 Index to FAA Office of Aviation Medicine Reports: 1961 through 1978. ADA067983/7GA
- 79-2 Snow, C. C., Hartman, S., Giles, E., and Young, F. A: Sex and race determination of crania by calipers and computer: A test of the Giles and Elliot discriminant functions in 52 forensic cases. ADA065448/36A
- 79-3 Lewis, M. A: A comparison of three models for determining test fairness. ADA066586/9GA
- 79-4 Lewis, M. F., and Mertens, H. W: Pilot performance during simulated approaches and landings made with various computer-generated visual glidepath indicators. ADA066220/5GA
- 79-5 Tobias, J. V., and Kidd, G. D., Jr: Accoustic signals for emergency evacuation. ADA066113/2.A
- 79-6 Pollard, D. W: Injuries in air transport emergency evacuations. ADA069372/1GA
- 79-7 Collins, W. E., and Chiles, W. D: Laboratory performance during acute intoxication and hangover. ADA069373/9GA
- 79-8 Lategola, M. T., and Trent, C. C: A lower body negative pressure box for +Gz simulation in the upright seated position. ADA069326/7GA
- 79-9 Schroeder, D. J., and Collins, W. E: Effects of congener and noncongener alcoholic beverages on a clinical ataxia battery. ADA069375/4GA
- 79-10 Higgins, E. A., McKenzie, J. M., Funkhouser, G. E., and Mullen, S. R: Effects of propranolol on time of useful function (TUF) in rats. ADA068535/4GA
- 79-11 Smith, R. C: A comparison of the job attitudes and interest patterns of air traffic and airway facility personnel. ADA067826/8GA
- 79-12 Thackray, R. I., and Touchstone, R. M: Visual search performance during simulated radar observation with and without a sweepline. ADA068020/7GA
- 79-13 McFadden, E. B. (Ed.): Oxygen equipment and rapid decompression studies. ADA070285/2GA
- 79-14 Boone, J. O., and Lewis, M. A: The selection of air traffic control specialists: Two studies demonstrating methods to insure an accurate validity coefficient for selection devices. ADA068581/8GA
- 79-15 Revzin, A. M: Development of electrophysiological indices of neurological toxicity for organophosphate pesticides and depressant drugs. ADA070299/3GA
- 79-16 Tobias, J. V: Interstimulus interval as it affects temporary threshold shift in serial presentations of loud tones. ADA072006/0GA
- 79-17 Chandler, R. F., and Trout, E. M: Evaluation of seating and restraint systems conducted during fiscal year 1978. ADA074881/4
- 79-18 Pickrel, E. W: Performance standards for pass-fail determinations in the national air traffic flight service station training program. ADA081066/3
- 79-19 Dille, J. R., and Booze, C. F: The 1976 accident experience of civilian pilots with static physical defects. ADA07718919

- 79-20 Higgins, E. A., Lategola, M. T., McKenzie, J. M., Melton, C. E., and Vaughan, J. A: Effects of ozone on exercising and sedentary adult men and women representative of the flight attendant population. ADA080045/8
- 79-21 Boone, J. O: Toward the development of a new selection battery for air traffic control specialists. ADA080065/6
- 79-22 Rasmussen, P. G., Garner, J. D., Blethrow, J. G., and Lowrey, D. L: Readability of self-illuminated signs in a smoke-obscured environment. ADA081260/2
- 79-23 Pollard, D. W., Anderson, J. A., and Melton, R. J: A description of the Civil Aeromedical Institute airline cabin safety data bank: 1970-1976. ADA081155/4
- 79-24 Thackray, R. I., and Touchstone, R. M: Effects of noise exposure on performance of a simulated radar task. ADA081065/5
- 79-25 Mertens, H. W: Runway image as a cue for judgment of approach angle. ADA080929/3
- 79-26 Collins, W. E: Performance effects of alcohol intoxication and hangover at ground level and at simulated altitude. ADA079439/6
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- 80-1 Thackray, R. I: Boredom and monotony as a consequence of automation: A consideration of the evidence relating boredom and monotony to stress. ADA085069/3
- 80-2 Friedberg, W., and Neas, B. R. (Eds.): Cosmic radiation exposure during air travel. ADA084801/0
- 80-3 Kirkham, W. R., Simpson, J. M., Wallace, T. F., and Grape, P. M: Aircraft crashworthiness studies: Findings in accidents involving an aerial application aircraft. ADA084619/6
- 80-4 Ryan, L. C., and Mohler, S. R: The current role of alcohol as a factor in civil aircraft accidents. ADA086261/5
- 80-5 Boone, J. O., Steen, J. A., and VanBuskirk, L. K: System performance, error rates, and training time for recent FAA Academy nonradar graduates, community persons, and handicapped persons on the radar training facility pilot position. ADA087661/5
- 80-6 Kirkham, W. R: Medical and toxicological factors in aircraft accidents. ADA087690/4
- 80-7 Collins, W. E., Boone, J. O., and VanDeventer, A. D. (Eds.): The selection of air traffic control specialists: I. History and review of contributions by the Civil Aeromedical Institute. ADA087655/7
- 80-8 Booze, C. F., Pidkowicz, J. K., Davis, A. W., and Bolding, F. A: Postmortem coronary atherosclerosis findings in general aviation accident pilot fatalities: 1975-1977. ADA089428/7
- 80-9 Higgins, E. A., Lategola, M. T., Melton, C. E., and Vaughan, J. A: Effects of ozone (0.30 parts per million, ~600 ug/m3) on sedentary men representative of airline passengers and cockpit crewmembers. ADA092268/2
- 80-10 McKenzie, J. M., Higgins, E. A., Funkhouser, G. E., Moses, R., Fowler, P. R., and Wicks, S. M: Changes in the oxygen-hemoglobin dissociation curve and time of useful function at hypobaric pressures in rats after chronic oral administration of propranolol. ADA089139/0
- 80-11 Dille, J. R., and Linder, M. K: The effects of tobacco on aviation safety. ADA091510/8
- 80-12 Chandler, R. F., Garner, J. D., Lowrey, D. L., Blethrow, J. G., and Anderson, J. A: Considerations relative to the use of canes by blind travelers in air carrier aircraft cabins. ADA092528/9

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---

- 80-13 Rasmussen, P. G., Chesterfield, B. P., and Lowrey, D. L: Readability of self-illuminated signs obscured by black fuel-fire smoke. ADA092529/7
- 80-14 Smith, R. C: Stress, anxiety, and the air traffic control specialist: Some conclusions from a decade of research. ADA093266/5
- 80-15 Boone, J. O., Van Buskirk L., and Steen, J. A: The Federal Aviation Administration's radar training facility and employee selection and training. ADA093027/1
- 80-16 Melton, C. E: Effects of long-term exposure to low levels of ozone: A review. ADA094426/4
- 80-17 Thackray, R. I., and Touchstone, R. M: An exploratory investigation of various assessment instruments as correlates of complex visual monitoring performance. ADA097276/0
- 80-18 deSteiguer, D., and Saldivar, J. T: Evaluation of the protective efficiency of a new oxygen mask for aircraft passenger use to 40,000 feet. ADA097046/7
- 80-19 Dark, S.J: Characteristics of medically disqualified airman applicants in calendar years 1977 and 1978. ADA098766/9
- 80-20 McKenzie, J.M: Vocational options for those with sickle cell trait: Questions about hypoxemia and the industrial environment. ADA098706/5
- 1981**
- 81-1 Dille, J. R., and Haraway, A: Index to FAA Office of Aviation Medicine Reports: 1961 through 1980. ADA106227/2
- 81-2 Lategola, M. T., Lyne, P. J., and Burr, M. J: Cardiorespiratory assessment of 24-hour crash-diet effects on altitude, +Gz, and fatigue tolerances. ADA106379/1
- 81-3 Federal Aviation Administration Contract DOT-FA-77WA-4076: Neurological and neurosurgical conditions associated with aviation safety. ADA098697/6
- 81-4 Simpson, L. P., and Goulden, D. R: Aviation medicine translations: Annotated bibliography of recently translated material. X. ADA098916/0
- 81-5 Hutto, G. L., Smith, R. C., and Thackray, R. I: Methodology in the assessment of stress among air traffic control specialists (ATCS): Normative adult data for the State-Trait Anxiety Inventory from non-ATCS populations. ADA103192/1
- 81-6 Mertens, H. W., and Lewis, M. F: Effect of different runway size on pilot performance during simulated night landing approaches. ADA103190/5
- 81-7 Chesterfield, B. P., Rasmussen, P. G., and Dillon, R. D: Emergency cabin lighting installations: An analysis of ceiling- vs. lower-cabinmounted lighting during evacuation trials. ADA103191/3
- 81-8 Higgins, E. A., Mertens, H. M., McKenzie, J. W., and Funkhouser, G. E: Physiological, biochemical, and performance responses to a 24-hour crash diet. ADA103143/4
- 81-9 Booze, C. F., Jr: Prevalence of selected pathology among currently certified active airman. ADA103397/6
- 81-10 Kirkham, W. R: Improving the crashworthiness of general aviation aircraft by crash injury investigations. ADA103316/6
- 81-11 Hanneman, G. D: Factors related to the welfare of animals during transport by commercial aircraft. ADA106226/4

- 81-12 Thackray, R. I., and Touchstone, R. M: Age-related differences in complex monitoring performance. ADA106225/6
- 81-13 Melton, C. E., McKenzie, J. M., Wicks, S. M., and Saldivar, J. T: Fatigue in flight inspection field office (FIFO) flight crews. ADA106791/7
- 81-14 Dille, J. R., and Booze, C. F., Jr: The prevalence of visual deficiencies among 1979 general aviation accident airmen. ADA106489/8
- 81-15 Collins, W. E., Mastrullo, A. R., Kirkham, W. R., Taylor, D. K., and Grape, P. M: An analysis of civil aviation propeller-to-person accidents: 1965-1979. ADA105365/1
- 81-16 Collins, W. E., Schroeder, D. J., and Elam, G. W: A comparison of some effects of three antinotion sickness drugs on nystagmic responses to angular accelerations and to optokinetic stimuli. ADA107947/4
- 1982
- 82-1 Thackray, R. I., and Touchstone, R. M: Performance of air traffic control specialists (ATCS's) on a laboratory radar monitoring task: An exploratory study of complacency and a comparison of ATCS and non-ATCS performance. ADA118239/3
- 82-2 Boone, J. O: A generic model for evaluation of the Federal Aviation Administration air traffic control specialist training programs. ADA106379/1
- 82-3 Lategola, M. T., Lyne, P. J., and Burr, M. J: Alcohol-induced physiological displacements and their effects on flight-related functions. ADA115473/1
- 82-4 Lategola, M. T., Lyne, P. J., and Burr, M. J: Effects of prior physical exertion on tolerance to hypoxia, orthostatic stress, and physical fatigue. ADA114741/2
- 82-5 Lategola, M. T., and Flux, M: Evaluation of cardiopulmonary factors critical to successful emergency perinatal air transport. ADA114743/8
- 82-6 Mertens, H. W., and Lewis, M. F: Effects of approach lighting and variation in visible runway length on perception of approach angle in simulated night landings. ADA114742/0
- 82-7 Kirkham, W. R., Wicks, S. M., and Lowrey, D. L: Crashworthiness studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents. ADA114878/2
- 82-8 Pollard, D. W., Folk, E. D., and Chandler, R. F: Flight attendant injuries: 1971-1976. ADA114909/5
- 82-9 Reynolds, H. M., Snow, C. C., and Young, J. W: Spatial geometry of the human pelvis. ADA118238/5
- 82-10 Higgins, E. A., Mertens, H. W., McKenzie, J. M., Funkhouser, G. E., White, M. A., and Milburn, N. J: The effects of physical fatigue and altitude on physiological, biochemical, and performance responses. ADA122796/6
- 82-11 Rock, D. B., Dailey, J. T., Ozur, H., Boone, J. O., and Pickrel, E. W: Selection of applicants for the air traffic controller occupation. ADA122795/8
- 82-12 Friedberg, W., Faulkner, D. N., and Snyder, L: Transport index limits for shipments of radioactive material in passenger-carrying aircraft. ADA122794/1
- 82-13 Kirkham, W. R., Wicks, S. M., Lowrey, D. L: G incapacitation in aerobatic pilots: A flight hazard. ADA123757/7
- 82-14 Norwood, G., and Jordan, J. L: Regulatory aviation medicine: Its philosophies and limitations. ADA124043/1

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---

- 82-15 Lacefield, D. J., Roberts, P. A., and Grape, P. M: Carbon monoxide in-flight incapacitation: An occasional toxic problem in aviation. ADA123849/2
- 82-16 Thackray, R. I., and Touchstone, R. M: Performance of 40- to 50-year- old subjects on a radar monitoring task: The effects of wearing bifocal glasses and interpolated rest periods on target detection time. ADA123843/5
- 82-17 Melton, C. E: Physiological stress in air traffic controllers: A review. ADA123853/4
- 82-18 Boone, J. O: Functional aging in pilots: An examination of a mathematical model based on medical data on general aviation pilots. ADA123756/9
- 82-19 Schroeder, D. J., Collins, W. E., and Elam, G. W: Effects of some motion sickness suppressants on tracking performance during angular accelerations. ADA123839/3

### **1983**

- 83-1 Dille, J. R., and Haraway, A: Index to FAA Office of Aviation Medicine Reports: 1961 through 1982. ADA127463/8
- 83-2 McKenzie, J. M., Higgins, E. A., Fowler, P. R., Funkhouser, G. E., White, M. A., and Moser, E: Sensitivity of some tests for alcohol abuse: Findings in nonalcoholics recovering from intoxication. ADA126138/7
- 83-3 Coltman, J. W: Design and test criteria for increased energy-absorbing seat effectiveness. ADA1280125/5
- 83-4 Mertens, H. W., McKenzie, J. M., and Higgins, E. A: Some effects of smoking withdrawal on complex performance and physiological responses. ADA126551/1
- 83-5 Dark, S. J: Characteristics of medically disqualified airline pilots. ADA127429/9
- 83-6 VanDeventer, A. D., Taylor, D. K., Collins, W. E., and Boone, J. O: Three studies of biographical factors associated with success in air traffic control specialist screening/training at the FAA Academy. ADA128784/6
- 83-7 Schroeder, D. J., and Deloney, J. R: Job attitudes toward the new maintenance concept of the Airway Facilities Service. ADA133282/4
- 83-8 Kirkham, W. R., Wicks, S. M., and Lowrey, D. L: Crashworthiness: An illustrated commentary on occupant survival in general aviation accidents. ADA130198/5
- 83-9 Boone, J. O: Radar Training Facility initial validation. ADA133220/4
- 83-10 deSteiguer, D., and Saldivar, J. T: An analysis of potential breathing devices intended for use by aircraft passengers. ADA132648/7
- 83-11 Pickrel, E. W., and Convey, J. J: Color perception and ATC job performance. ADA132649/5
- 83-12 Crane, C. R., Sanders, D. C., Endecott, B. R., and Abbott, J. K: Inhalation toxicology: III. Evaluation of thermal degradation products from aircraft and automobile engine oils, aircraft hydraulic fluid, and mineral oil. ADA133221/2
- 83-13 Thackray, R. I., and Touchstone, R. M: Rate of initial recovery and subsequent radar monitoring performance following a simulated emergency involving startle. ADA133602/3
- 83-14 deSteiguer, D., Saldivar, J. T., Higgins, E. A., and Funkhouser, G. E: The objective evaluation of aircrew protective breathing equipment: V. Mask/goggles combinations for female crewmembers. ADA134912



- 83-15 Mertens, H. W., Higgins, E. A., and McKenzie, J. M: Age, altitude, and workload effects on complex performance. ADA133594/2
- 83-16 Young, J. W., Chandler, R. F., Snow, C. C., Robinette, K. M., Zehner, G. F., and Lofberg, M. S: Anthropometric and mass distribution characteristics of the adult female. ADA135316
- 83-17 Schroeder, D. J., and Goulden, D. R: A bibliography of shift work research: 1950-1982. ADA135644
- 83-18 Dille, J. R., and Booze, C. F., Jr: The 1980 and 1981 accident experience of civil airmen with selected visual pathology. ADA134898

**1984**

- 84-1 Pollard, D. W., Steen, J. A., Biron, W. J., and Cremer, R. L: Cabin safety subject index. ADA140409
- 84-2 Sells, S. B., Dailey, J. T., and Pickrel, E. W: Selection of air traffic controllers. ADA147765
- 84-3 Booze, C. F., Jr., and Simcox, L. S: Blood pressure levels of active pilots compared with those of air traffic controllers. ADA146645
- 84-4 Lategola, M. T., Davis, A. W., Jr., Gilcher, R. O., Lyne, P. J., and Burr, M. J: Aviation-related cardiorespiratory effects of blood donation in female private pilots. ADA148045
- 84-5 Hanneman, G. D., and Sershon, J. L: Tolerance endpoint for evaluating the effects of heat stress in dogs. ADA148104
- 84-6 VanDeventer, A. D., Collins, W. E., Manning, C. A., Taylor, D. K., and Baxter, N. E: Studies of poststrike air traffic control specialist trainees: I. Age, biographic factors, and selection test performance related to Academy training success. ADA147892
- 84-7 Dille, J. R., and Harris, H. L: Efforts to improve aviation medical examiner performance through continuing medical education and annual performance reports. ADA148078
- 84-8 Booze, C. F., Jr: Health examination findings among active civil airmen. ADA148325
- 84-9 Dark, S. J: Medically disqualified airline pilots. ADA149454

**1985**

- 85-1 Pollard, D. W., Steen, J. A., and Penland, T: Federal Aviation Regulations Part 135 cabin safety subject index. ADA156946
- 85-2 Melton, C. E: Physiological responses to unvarying (steady) and 2-2-1 shifts: Miami International Flight Service Station. ADA155751
- 85-3 Mertens, H. W., and Collins, W. E: The effects of age, sleep deprivation, and altitude on complex performance. ADA156987
- 85-4 Crane, C. R., Sanders, D. C., Endecott, B. R., and Abbott, J. K: Inhalation toxicology: IV. Times to incapacitation and death for rats exposed continuously to atmospheric hydrogen chloride gas. ADA157400
- 85-5 Collins, W. E., Mertens, H. W., and Higgins, E. A: Some effects of alcohol and simulated altitude on complex performance scores and Breathalyzer readings. ADA158925

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---

- 85-6 Booze, C. F., Jr., and Staggs, C. M: A comparison of postmortem coronary atherosclerosis findings in general aviation pilot fatalities. ADA159811
- 85-7 Convey, J.J: Passing scores for the FAA ATCS color vision test. ADA160889
- 85-8 Lacefield, D.J., Roberts, P.A., and Grape, P.M: Drugs of abuse in aviation fatalities: 1. Marijuana. ADA161911
- 85-9 Dark, S.J: Characteristics of medically disqualified airman applicants in calendar years 1982 and 1983. ADA162209
- 85-10 Higgins, E.A., Saldivar, J.T., Lyne, P.J., and Funkhouser, G.E: Evaluation of a passenger mask modified with a rebreather bag for protection from smoke and fumes. ADA162473
- 85-11 Rueschhoff, B.J., Higgins, E.A., Burr, M.J., and Branson, D.M: Development and evaluation of a prototype life preserver. ADA163224
- 85-12 Russell, J.C., and Davis, A.W: Alcohol rehabilitation of airline pilots. ADA163076
- 85-13 Thackray, R.I., and Touchstone, R.M: The effect of visual taskload on critical flicker frequency (CFF) change during performance of a complex monitoring task. ADA163673

**1986**

- 86-1 Sanders, D.C., Crane, C.R., and Endecott, B.R: Inhalation toxicology: V. Evaluation of relative toxicity to rats of thermal decomposition products from two aircraft seat fire-blocking materials. ADA165034
- 86-2 Melton, C.E., and Bartanowicz, R.S: Biological rhythms and rotating shift work: Some considerations for air traffic controllers and managers. ADA168742
- 86-3 Crane, C.R., Sanders, D.C., Endecott, B.R., and Abbott, J.K: Inhalation toxicology: VI. Evaluation of the relative toxicity of thermal decomposition products from nine aircraft panel materials, ADA168250
- 86-4 Thackray, R.I., and Touchstone, R.M: Complex monitoring performance and the coronary-prone Type A behavior pattern. ADA168240
- 86-5 Crane, C.R., Sanders, D.C., Endecott, B.R., and Abbott, J.K: Inhalation toxicology: VII. Times to incapacitation and death for rats exposed continuously to atmospheric acrolein vapor.
- 86-6 Convey, J.J: The Flight Service Station Training Program: 1981-1985. ADA171485
- 86-7 Dark, S.J: Medically disqualified airline pilots. ADA173244
- 86-8 Crane, C.R., and Sanders, D.C: Inhalation toxicology: VIII. Establishing heat tolerance limits for rats and mice subjected to acute exposures at elevated air temperatures. ADA173031
- 86-9 Collins, W.E: Effects of sleep loss on vestibular responses during simple and complex vestibular stimulation. ADA173292

**1987**

- 87-1 Dille, J.R., and Grimm, M.H: Index to FAA Office of Aviation Medicine Reports: 1961 through 1986. ADA180281
- 87-2 Higgins, E.A., Saldivar, J.T., Lyne, P.J., and Funkhouser, G.E: A study of passenger workload as related to protective breathing requirements. ADA181089

- 87-3 Hanneman, G.D., and Sershon, J.L: Tolerance by unacclimated Beagle dogs to freezing and subfreezing temperatures. ADA181304
- 87-4 Schroeder, D.J., Collins, W.E., and Dollar, C.S: 1986 survey of aviation business operators: Their views of FAA airworthiness inspectors. ADA181369
- 87-5 Higgins, E.A: Summary report of the history and events pertinent to the Civil Aeromedical Institute's evaluation of providing smoke/fume protective breathing equipment for airline passenger use. ADA184499
- 87-6 Diehl, A.E., and Lester, L.F: Private pilot judgment training in flight school settings. ADA188408
- 87-7 Booze, C.F., Jr: Sudden in-flight incapacitation in general aviation. ADA187044
- 87-8 Hanneman, G.D., and Sershon, J.L: A temperature/humidity tolerance index for transporting Beagle dogs in hot weather. ADA190948
- 1988**
- 88-1 Thackray, R. I. , and Touchstone, R. M: An evaluation of the effects of high visual taskload on the separate behaviors involved in complex monitoring performance. ADA190641
- 88-2 Collins, W. E., and Mertens, H. W: Age, alcohol, and simulated altitude: Effects on performance and breathalyzer scores. ADA190642
- 88-3 Manning, C. A., Kegg, P. S., and Collins, W. E: Studies of poststrike air traffic control specialist trainees: II. Selection and Screening. ADA199177
- 88-4 Thackray, R. I: Performance recovery following startle: a laboratory approach to the study of behavioral response to sudden aircraft emergencies. ADA199827
- 88-5 Clough, D. L: Airway science curriculum demonstration project: Summary of initial evaluation findings. ADA201995
- 1989**
- 89-1 Thackray, R. I., and Touchstone, R. M: A comparison of detection efficiency on an air traffic control monitoring task with and without computer aiding. ADA206422
- 89-2 Booze, C. F., Jr: Prevalence of disease among active civil airmen. ADA206050
- 89-3 Colangelo, E. J., and Russell, J. C: Injuries to seat occupants of light airplanes. ADA207579
- 89-4 Crane, C. R., Sanders, D. C., and Endecott, B. R: Inhalation toxicology: IX. Times-to-incapacitation for rats exposed to carbon monoxide alone, to hydrogen cyanide alone, and to mixtures of carbon monoxide and hydrogen cyanide. ADA208195
- 89-5 Higgins, E. A., and Vant, J. H. B: Operation Workload - A study of passenger energy expenditure during an emergency evacuation. ADA209234
- 89-6 Manning, C. A., Della Rocco, P. S., and Bryant, K. D: Prediction of success in FAA air traffic control field training as a function of selection and screening test performance. ADA209327
- 89-7 Collins, W. E., Schroeder, D. J., and Nye, L. G: Relationships of anxiety scores to Academy and field training performance of air traffic control specialists. ADA209326

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---

- 89-8 Higgins, E. A., McLean, G. A., Lyne, P. J., Funkhouser, G. E., and Young, J. W: Performance evaluation of the Puritan-Bennett crewmember portable protective breathing device as prescribed by portions of FAA Action Notice A-8150.2. ADA210882
- 89-9 Shepherd, W. T., and Parker, J. F., Jr: Human factors issues in aircraft maintenance and inspection. ADA215 724
- 89-10 Schlegel, T. T., Higgins, E. A., McLean, G. A., Lyne, P. J., England, H. M., and Atocknie, P. A: Comparison of protective breathing equipment performance at ground level and 8,000 feet altitude using parameters prescribed by portions of FAA Action Notice A-8150.2. ADA212852
- 89-11 Higgins, E. A., McLean, G. A., Lyne, P. J., Funkhouser, G. E., and Young, J. W: Evaluation of the Scott Aviation portable protective breathing device for contaminant leakage as prescribed by FAA Action Notice A-8150.2. ADA216799
- 89-12 McLean, G. A., Higgins, E. A., and Lyne, P. J: The effects of wearing passenger protective breathing equipment on evacuation times through type III and type IV emergency aircraft exits in clear air and smoke. ADA216798
- 89-13 Melton, C. E: Airliner cabin ozone: an updated review. ADA233156.
- 89-14 Rasmussen, P. B., and Chittum, C. G: The influence of adjacent seating configurations on egress through a type III emergency exit. ADA218393
- 1990
- 90-1 Collins, W.E., Wayda, M.E., and Baxter, N.E: Index of FAA Office of Aviation Medicine Reports: 1961 through 1989. AD-221414
- 90-2 Myers, J.G: Management assessment: implications for development and training. ADA219178
- 90-3 Thackray, R.I., and Touchstone, R. M: Effects of monitoring under high and low taskload on detection of flashing and colored radar targets. ADA220313
- 90-4 Collins, W.E., Nye, L.G., and Manning, C.A: Studies of poststrike air traffic control specialist trainees: III. Changes in demographic characteristics of Academy entrants and biodemographic predictors of success in air traffic controller selection and Academy screening. ADA223480
- 90-5 Downey, L.E., and Dark, S.J: Medically disqualified airline pilots in calendar years 1987 and 1988. ADA224512
- 90-6 Manning, C.A., and Schroeder, D.J: Pilot views of Montgomery County, Texas automated FSS services. ADA227484
- 90-7 Hudson, L.S., Booze, C.F. Jr., and Davis, A.W: Right bundle branch block as a risk factor for subsequent cardiac events. ADA226596
- 90-8 Schroeder, D.J., Dollar, C.S., and Nye, L.G: Correlates of two experimental tests with performance in the FAA Academy air traffic control nonradar screen program. ADA226419
- 90-9 Mertens, H.W: Evaluation of functional color vision requirements and current color vision screening tests for air traffic control specialists. ADA227436
- 90-10 Nakagawara, V.B: The use of contact lenses in the civil airman population. ADA227450
- 90-11 Gowdy, V: Development of a crashworthy seat for commuter aircraft. ADA227486
- 90-12 Valdez, C.D: The FAA altitude chamber training flight profile: A survey of altitude reactions — 1965-1989. ADA230057

- 90-13 Della Rocco, P.S., and Manning, C.A: Selection of air traffic controllers for automated systems: applications from current research. ADA230058
- 90-14 Parker, J.F. Jr., and Shepherd, W.T., Co-editors: Second Federal Aviation Administration meeting on human factors issues in aircraft maintenance and inspection: Information exchange and communications. ADA230270
- 90-15 Crane, C.R., Sanders, D.C., and Endecott, B.R: Inhalation toxicology: X. Times to incapacitation for rats exposed continuously to carbon monoxide, acrolein, and to carbon monoxide-acrolein mixtures. ADA230639
- 90-16 Sanders, D.C., and Endecott, B.R: Inhalation toxicology: XI. The effect of elevated temperature on carbon monoxide toxicity. ADA231185

**1991**

- 91-1 Nakagawara, V.B: The effect of simulated altitude on the visual fields of glaucoma patients and the elderly. ADA233167
- 91-2 Hordinsky, J.R., and George, M.H: Utilization of emergency medical kits by air carriers. ADA234784
- 91-3 Hordinsky, J.R., and George, M.H: Response capability during civil air carrier inflight medical emergencies. ADA235526
- 91-4 Broach, D: Flight service specialist initial qualifications course: Content validation of FAA Academy course 50232. ADA237126
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- 91-9 Wing, H., and Manning, C.A: Selection of air traffic controllers: Complexity, requirements, and public interest. ADA238267
- 91-10 Witt, L. A., and Myers, J.G: Two studies on participation in decision-making and equity among FAA personnel. ADA239907
- 91-11 Witt, L. A., and Broach, D: Exchange ideology as a moderator of the procedural justice-satisfaction relationship. ADA239908
- 91-12 McLean, G.A, Wilcox, B.C., and Canfield, D.V: Selection criteria for alcohol detection methods. ADA240441
- 91-13 Turner, J.W., and Huntley, M. S. Jr: Civilian training in high-altitude flight physiology. ADA241296
- 91-14 Nakagawara, V.B., Loochan, F.K., and Wood, K.J: The prevalence of aphakia in the civil airman population. ADA214032
- 91-15 Witt, L. A., and Hellman, C.M: Cross-level inferences of job satisfaction in the prediction of intent to leave. ADA242779
- 91-16 Shepherd, W.B., Johnson, W.B., Druray, C.G., Taylor, J.C., and Berninger, D: Human factors in aviation maintenance. Phase 1: Progress report. ADA243844

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---

- 91-17 Sanders, D.C., Endecott, B.S., and Chaturvedi, A.K: Inhalation toxicology: XII. Comparison of toxicity rankings of six polymers in lethality and by incapacitation in rats. ADA244599
- 91-18 Broach, D: Air traffic control specialists in the Airway Science Curriculum Demonstration Project 1984-1990: Third summative evaluation. ADA244128
- 1992
- 92-1 Collins, W.E., and Wayda, M.E: Index of FAA Office of Aviation Medicine Reports: 1961 through 1991. ADA245509
- 92-2 Friedberg, W., Snyder, L., and Faulkner, D.N: Radiation exposure of air carrier crewmembers II. ADA245508
- 92-3 Thackray, R.I: Human factors evaluation of the work environment of operators engaged in the inspection and repair of aging aircraft. ADA246445
- 92-4 May, N.D: Exposures from headset interference tones. ADA247175
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- 92-6 Mertens, H.W., Thackray, R.I., and Touchstone, M: Effects of color vision deficiency on detection of color-highlighted targets in a simulated air traffic control display. ADA246586
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- 92-10 Nye, L.G., and Witt, L.A: Dimensionality and construct validity of the Perceptions of Organizational Politics Scale (POPS). ADA247620
- 92-11 O'Donnell, R.D., Hordinsky, J.R., Madakasira, S., Moise, S., and Warner, D: A candidate automated test battery for neuropsychological screening of airmen: Design and preliminary validation. ADA247701
- 92-12 Revzin, A.M., and Rasmussen, P.G: A new test of scanning and monitoring ability: Methods and initial results. ADA249123
- 92-13 Witt, L.A., and Hellman, C: Effects of subordinate feedback to the supervisor and participation in decision-making in the prediction of organizational support. ADA249125
- 92-14 Nakagawara, V.B., Loochan, F.K., and Wood, K.J: The prevalence of artificial lens implants in the civil airman population. ADA249125
- 92-15 Myers, J.G: Survey of aviation medical examiners: Information and attitudes about the pre-employment and pre-appointment drug testing program. ADA249124
- 92-16 Myers, J.G: A longitudinal examination of applicants to the air traffic supervisory identification and development program. ADA251879
- 92-17 Witt, L.A: Organizational politics, participation in decision-making, and job satisfaction. ADA251878
- 92-18 Wilcox, B.C., England, H.M. , Jr., and McLean, G.A: Inward contaminant leakage tests of the S-Tron Corporation emergency escape breathing device. ADA251888

- 92-19 Teague, S.M., and Hordinsky, J.R: Tolerance of beta blocked hypertensives during orthostatic and altitude stress. ADA249904
- 92-20 Gowdy, V., and DeWeese, R: Evaluation of head impact kinematics for passengers seated behind interior walls. ADA252651
- 92-21 Witt, L.A: Procedural justice, occupational identification, and organizational commitment. ADA252493
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- 92-24 Canfield, D.V., Kupiec, T.C., and Huffine, E.F: Postmortem alcohol production in fatal aircraft accidents. ADA254680
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- 92-26 Manning, C.A., and Broach, D: Identifying ability requirements for operators of future automated air traffic control systems. ADA256615
- 92-27 McLean, G.A., Chittum, C.B., Funkhouser, G.E., Fairlie, G.W., and Folk, E.W: Effects of seating configuration and number of type III exits on emergency aircraft evacuation. ADA255754
- 92-28 Mertens, H.W., and Milburn, N.J: Performance of color-dependent tasks of air traffic control specialists as a function of type and degree of color vision deficiency. ADA255794
- 92-29 Mertens, H.W., and Milburn, N.J: Validity of clinical color vision tests for air traffic control specialists. ADA258219
- 92-30 Della Rocco, P.S., Milburn, N., and Mertens, H: Comparison of performance on the Shipley Institute of Living scale, air traffic control specialist selection test, and FAA Academy screen. ADA259249
- 92-31 OU Vortac, Edwards, M.B., Jones, J.P., Manning, C.A., and Rotter, A.J: En route air traffic controllers' use of flight progress strips: A graph-theoretic analysis. ADA259062
- 1993**
- 93-1 Rodgers, M.D., and Drechsler, G.K: Conversion of the CTA, Inc., en route operations concepts database into a formal sentence outline job task taxonomy. ADA261921
- 93-2 Collins, W.E: A review of civil aviation propeller-to-person accidents: 1980-1989. ADA260695
- 93-3 Antuñano, M.J: Index of international publications in aerospace medicine. ADA262908
- 93-4 Schroeder, D.J., Broach, D., and Young, W.C: Contribution of personality to the prediction of success in initial air traffic control specialist training. ADA264699
- 93-5 Galaxy Scientific Corporation: Human factors in aviation maintenance - Phase Two progress report. ADA264367
- 93-6 Wilcox, B., Jr., McLean, G., and England, H., Jr: Comparison of portable crewmember protective breathing equipment (CPBE) designs. ADA265362

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---

- 93-7 Sanders, D.C., Endecott, B.R., Ritter, R.M., and Chaturvedi, A.K: Variations of time-to-incapacitation and carboxyhemoglobin values in rats exposed to two carbon monoxide concentrations. ADA266109
- 93-8 Chaturvedi, A.K., Endecott, B.R., Ritter, R.M., and Sanders, D.C: Variations in time-to-incapacitation and blood cyanide values for rats exposed to two hydrogen cyanide gas concentrations. ADA265924
- 93-9 Rodgers, M.D., and Blanchard, R.E: Accident proneness: A research review. ADA266032
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- 93-11 Nakagawara, V.B., and Wood, K.J: Aviation accident risk for airmen with aphakia and artificial lens implants. ADA268389
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- 93-15 Galaxy Scientific Corp: Human factors in aviation maintenance — Phase three, volume 1 progress report. ADA270508
- 93-16 Milburn, N.J., and Mertens, H.W: Validation of an inexpensive test illuminant for aeromedical color vision screening. N94-14854
- 93-17 Mertens, H.W., and Milburn, N.J: Validity of FAA-approved color vision tests for Class II and Class III aeromedical screening. N94-14846
- 93-18 Hellman, C.W., and Witt, L.A: Factors associated with continuance commitment to FAA matrix teams. ADA274561
- 93-19 McLean, G.A., Smith, L.T., Hill, T.J., and Rubenstein, C.J: Physiological correlates of stress-induced decrements in human perceptual performance. ADA274240
- 93-20 Prinzo, O.V., and Britton, T.W: ATC/pilot voice communications — A survey of the literature. ADA274457
- 93-21 Nakagawara, V.B., Wood, K.J., and Montgomery, R.W: Vision impairment and corrective considerations of civil airmen. ADA275508
- 93-22 Rodgers, M.D. (ed.): An examination of the operational error database for air route traffic control centers. ADA275986
- 1994
- 94-1 Collins, W.E., and Wayda, M.E: Index of FAA Office of Aviation Medicine Reports: 1961 through 1993. ADA275913
- 94-2 Witt, A.W: Perceptions of organizational support and affectivity as predictors of job satisfaction. ADA277047
- 94-3 OU Vortac, Edwards, M.B., Fuller, D.K., and Manning, C.A: Automation and cognition in air traffic control: An empirical investigation. ADA277057
- 94-4 Broach, D., and Brecht-Clark, J: Validation of the Federal Aviation Administration air traffic control specialist pre-training screen. ADA277549



- 94-5 Blanchard, R.E., and Vardaman, J.J: Human factors in airway facilities maintenance: Development of a prototype outage assessment inventory. N94-26136
- 94-6 Schroeder, D.J., Touchstone, R.M., Stern, J.A., Stoliarov, N., and Thackray, R: Maintaining vigilance on a simulated ATC monitoring task across repeated sessions. ADA278792
- 94-7 Sanders, D.C., Chaturvedi, A.K., Endecott, B.R., Ritter, R.M., and Vu, N: Toxicity of carbon monoxide-hydrogen cyanide gas mixtures: Exposure concentration, time-to-incapacitation, carboxyhemoglobin, and blood cyanide parameters. N94-29919
- 94-8 Rasmussen, P., and Revzin, A: Scanning and monitoring performance can be affected by the reinforcement values of the events being monitored. N94-29918
- 94-9 Broach, D., and Manning, C.A: Validity of the air traffic control specialist nonradar screen as a predictor of performance in radar-based air traffic control training. ADA279745
- 94-10 Garner, R.P., Wilcox, B.C., England, H.M., and Nakagawara, V.B: Effects of cold exposure on wet aircraft passengers: A review. ADA280253
- 94-11 Marcus, J.E: A review of computer evacuation models and their data needs. ADA280707
- 94-12 Galaxy Scientific Corp: Human factors in aviation maintenance — Phase 3, Vol. 2 progress report. ADA283287
- 94-13 Nye, L.G., Schroeder, D.J., and Dollar, C.S: Relationships of Type A behavior with biographical characteristics and training performance of air traffic control specialists. ADA283813
- 94-14 Canfield, D.V., Flemig, J., Hordinsky, J.R., and Veronneau, S.J.H: Unreported medications used in incapacitating medical conditions found in fatal civil aviation accidents. ADA284233
- 94-15 Nakagawara, V.B., Montgomery, R.W., and Wood, K.J: The applicability of commercial glare test devices in the aeromedical certification of pilot applicants. ADA284232
- 94-16 White, V.L., Canfield, D.V., and Hordinsky, J.R: Elimination of quinine in two subjects after ingestion of tonic water: An exploratory study. ADA284760
- 94-17 Stern, J.A., Boyer, D., and Schroeder, D.J: Blink rate as a measure of fatigue: A review. ADA284779
- 94-18 Endecott, B.R., Sanders, D.C., and Chaturvedi, A.K: Simultaneous gas-chromatographic determination of four toxic gases generally present in combustion gas atmospheres. ADA285666
- 94-19 Gowdy, V: The performance of child restraint devices in transport airplane passenger seats. ADA285624
- 94-20 Hilton Systems, Inc: Age 60 rule research, Part I: Bibliographic database. N95-13019
- 94-21 Hyland, D.T., Kay, E.J., Deimler, J.D., and Gurman, E.B: Age 60 rule research, Part II: Airline pilot age and performance: A review of the scientific literature. ADA286246
- 94-22 Kay, E.J., Harris, R.M., Voros, R.S., Hillman, D.J., Hyland, D.T., and Deimler, J.D: Age 60 rule research, Part III: Consolidated database experiments final report. ADA286247
- 94-23 Hyland, D.T., Kay, E.J., and Deimler, J.D: Age 60 rule research, Part IV: Experimental evaluation of pilot performance. N95-13199

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---

- 94-24 Holloway, F.A: Low-dose alcohol effects on human behavior and performance: An update on post-1984 studies. N95-14863
- 94-25 Williams, K.W., Ed: Summary proceedings of the joint industry-FAA conference on development and use of PC-based aviation training devices. N95-14917
- 94-26 Stern, J.A., Boyer, D., Schroeder, D.J., Touchstone, R.M., and Stoliarov, N: Blinks, saccades, and fixation pauses during vigilance task performance. ADA290600
- 94-27 Endsley, M., and Rodgers, M.D: Situation awareness information requirements analysis for en route air traffic control. ADA289649

**1995**

- 95-1 Collins, W.E: A review of civil aviation fatal accidents in which "lost/disoriented" was a cause/factor. ADA290944
- 95-2 Parker, J.F., Jr., and Shepherd, W.T: Development of an intervention program to encourage shoulder harness use and aircraft retrofit in general aviation: Phases I and II. ADA290966
- 95-3 Harris, H.C., Schroeder, D.J., and Collins, W.E: The effects of age and low doses of alcohol on compensatory tracking during angular acceleration. N95-23934
- 95-4 Edwards, M.B., Fuller, D.K., OU Vortac, and Manning, C.A: The role of flight progress strips in en route air traffic control: A time-series analysis. ADA291152
- 95-5 Besco, R.O., Sangal, S.P., Nesthus, T.E., and Veronneau, S.J.H: A longevity and survival analysis for a cohort of retired airline pilots. ADA292060
- 95-6 Williams, K.W., and Blanchard, R.E: Qualification guidelines for personal computer-based aviation training devices: Instrument rating. ADA292961
- 95-7 Schroeder, D.J., Harris, H.C., Collins, W.E., and Nesthus, T.E: Some performance effects of age and low blood alcohol levels on a computerized neuropsychological test. ADA292324
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- 95-9 OU VORTAC, Edwards, M.B., and Manning, C.A: Functions of external cues in prospective memory. ADA291932
- 95-10 Myers, J.G: Enhancing the effects of diversity awareness training: A review of the research literature. ADA293933; N95-26361
- 95-11 Nakagawara, V.B., Montgomery, R.W., and Wood, K.J: An assessment of aviation accident risk for aphakic civil airmen by class of medical certificate held and by age. ADA293407
- 95-12 Cruz, C.E., and Della Rocco, P.S: Sleep patterns in air traffic controllers working rapidly-rotating shifts: A field study. ADA294159; N95-26204
- 95-13 Mertens, H.W., Milburn, N.J., and Collins, W.E: Practical color vision tests for air traffic control applicants: En Route, Center, and Terminal facilities. ADA294560; N95-27323
- 95-14 Shepherd, W.T., and Galaxy Scientific Corp: Human factors in aviation maintenance — Phase IV progress report. N95-27696

- 95-15 Prinzo, O.V., Hendrix, A., and Britton, T.W: Development of a coding form for approach control/pilot voice communications. N95-28540
- 95-16 Rodgers, M.D., and Drechsler, G.K: Conversion of the TRACON operations concepts database into a formal sentence outline job task taxonomy. N95-28819
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- 95-18 Rodgers, M. (Ed): A human factors analysis of the operational demonstration flight inspection aircraft. N95-29365
- 95-19 Della Rocco, P.S., and Cruz, C.E: Shift work, age and performance: Investigation of the 2-2-1 shift schedule used in air traffic control facilities I: The sleep/wake cycle. N95-29261
- 95-20 Funkhouser, G.E., and George, M.H: Alternative methods for flotation seat cushion use. N95-29448
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- 95-24 O'Donnell, R: The effect of alcohol and fatigue on an FAA readiness-to-perform test. ADA299076
- 95-25 McLean, G.A., and George, M.H: Aircraft evacuations through type-III exits II: Effects of individual subject differences. ADA299237
- 95-26 Chaturvedi, A.K., and Canfield, D.V: Role of metabolites in aviation forensic toxicology. ADA299212
- 95-27 Hunter, D.R: Airmen research questionnaire: Methodology and overall results. ADA300583
- 95-28 Canfield, D.V., Flemig, J.W., Hordinsky, J.R., and Birky, M: Drugs and alcohol found in fatal civil aviation accidents between 1989 and 1993. ADA302527
- 95-29 Mandella, J.G., Jr., and Garner, R.P: An economical alternative for the secondary container used for transporting infectious disease substances. ADA302648
- 95-30 DeWeese, R.L: An experimental abdominal pressure measurement device for child ATDs. ADA302651
- 95-31 Layton, C.F., and Shepherd, W.T: Results of a field study of the performance enhancement system: A support system for aviation safety inspectors. ADA303336
- 95-32 Schroeder, D.J., Rosa, R.R., and Witt, L.A: Some effects of 8- vs. 10-hour work schedules on the test performance/alertness of air traffic control specialists. ADA302810
- 1996**
- 96-1 Collins, W.E., and Wayda, M.E: Index of FAA Office of Aviation Medicine Reports: 1961 through 1995. ADA3040263
- 96-2 Shepherd, W.T., and Galaxy Scientific Corp: Human factors in aviation maintenance: Phase V progress report. ADA304262

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---

- 96-3 Baker, S.P., Lamb, M.W., Li, G., and Dodd, R.S: Crashes of instructional flights: Analysis of cases and remedial approaches. ADA304890
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- 96-5 Albright, C.A., Truitt, T.R., Barile, A.B., OU Vortac, and Manning, C.A: How controllers compensate for the lack of flight progress strips. ADA305305
- 96-6 Morrison, J.E., Fotouhi C.H., and Broach D: A formative evaluation of the collegiate training initiative—Air Traffic Control Specialist Program. ADA305307
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- 96-10 Kanki, B.G. (Editor), and Prinzo, O.V. (Co-Editor): Methods and metrics of voice communications. ADA307148
- 96-11 Marcus, J.H: Dummy and injury criteria for aircraft crashworthiness. ADA308948
- 96-12 Nakagawara, V.B., Coffey, J.D., and Montgomery, R.W: Ophthalmic requirements and considerations for the en route air traffic control specialist: An ergonomic analysis of the visual work environment. N96-25681
- 96-13 Young, W.C., Broach, D., and Farmer, W.L: Differential prediction of FAA Academy performance on the basis of gender and written Air Traffic Control Specialist aptitude test scores. ADA308354
- 96-14 Kupiec, T.C., Canfield, D.V., and White, V.L: The analysis of benzodiazepines in forensic urine samples. ADA309377
- 96-15 Beringer, D.B: Use of off-the-shelf PC-based flight simulators for aviation human factors research. ADA309237
- 96-16 Beringer, D.B., and Harris, H.C., Jr: A comparison of the effects of navigational display formats and memory aids on pilot performance. ADA309382
- 96-17 Canfield, D., White, V., Soper, J., and Kupiec, T: A comprehensive drug screening procedure for urine using HPLC, TLC, and mass spectroscopy. ADA309962
- 96-18 McLean, G.A., George, M.H., Funkhouser, G.E., and Chittum, C.B: Aircraft evacuations onto escape slides and platforms I: Effects of passenger motivation. ADA311257
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- 96-20 Prinzo, O.V., and Maclin, O: Aviation topics speech acts taxonomy (ATSAT) pc user's guide version 2.0. ADA314179
- 96-21 Collins, W.E., and Dollar, C.S: Fatal general aviation accidents involving spatial disorientation: 1976-1992. ADA313864
- 96-22 Mertens, H.W., Milburn, N.J., and Collins, W.E: A further validation of the practical color vision test for enroute air traffic control applicants. ADA314600

- 96-23 Della Rocco, P., and Cruz, C: Shift work, age, and performance: Investigation of the 2-2-1 shift schedule used in air traffic control facilities II: Laboratory performance measures. ADA315493
- 96-24 Bailey, L., and Shaw, R: Flight inspection crew resource management training needs analysis. ADA316691
- 96-25 Veronneau, S.J.H., Mohler, S.R., Pennybaker, A.L., Wilcox, B.C., and Sahiar, F: Survival at high altitudes: Wheel-well passengers. ADA317375
- 96-26 Prinzo O.V., and Maclin, O: An analysis of approach control/pilot voice communications. ADA317528
- 96-27 Nakagawara V.B., and Wood K.J: The use of task-specific lenses by presbyopic air traffic controllers at the en route radar console. ADA320284

**1997**

- 97-1 Collins, W.E., and Wayda, M.E: Index of FAA Office of Aviation Medicine Reports: 1961 through 1996. ADA322331
- 97-2 DeJohn, C.A., Veronneau, S.J.H., and Hordinsky, J.R: Inflight medical care: An update. ADA322708
- 97-3 Driskill, W.E., Weissmuller, J.J., Quebe, J., Hand, D.K., Dittmar, M.J., and Hunter, D.R: The use of weather information in aeronautical decision-making. ADA323543
- 97-4 Young, W.C., Broach, D., and Farmer, W.L: The effects of video game experience on computer-based Air Traffic Control Specialist, air traffic scenario test scores. ADA322774
- 97-5 Gilliland, K., and Schlegel, R.E: A laboratory model of Readiness-to-Perform testing: Learning rates and reliability analyses for candidate testing measures. ADA323620
- 97-6 Kochan, J.A., Jensen, R.S., Chubb, G.P., and Hunter, D.R: A new approach to aeronautical decision-making: The expertise method. ADA323793
- 97-7 Nesthus, T.E., Garner, R.P., Mills, S.H., and Wise, R.A: Effects of simulated general aviation altitude hypoxia on smokers and nonsmokers. ADA323899
- 97-8 Thompson, R.C., Hilton, T.F., and Witt, L.A: Where the safety rubber meets the shop floor: A confirmatory model of management influence on workplace safety. ADA324677
- 97-9 Nesthus, T.E., Rush, L.L., and Wreggit, S.S: Effects of mild hypoxia on pilot performance at general aviation altitudes. ADA324719
- 97-10 Milburn, N.J., and Mertens, H.W: Evaluation of a range of target blink amplitudes for attention-getting value in a simulated air traffic control display. ADA326465
- 97-11 Taylor, H.L., Lintern, G., Hulin, C.L., Talleur, D., Emanuel, T., and Phillips, S: Transfer of training effectiveness of personal computer-based aviation training devices. ADA325887
- 97-12 Thompson, R.C., Hilton, T.F., and Behn, L.D: Baseline assessment of the National Association of Air Traffic Specialists/Federal Aviation Administration partnership. ADA326753
- 97-13 Endsley, M.R., and Rodgers, M.D: Distribution of attention, situation awareness, and workload in a passive air traffic control task: Implications for operational errors and automation. ADA328997
- 97-14 Kupiec, T.C., and Chaturvedi, A.K: Stereochemical determination of selegiline metabolites in postmortem biological specimens. ADA329026

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---

- 97-15 Broach, D., and Manning, C.A: Review of air traffic controller selection: An international perspective. ADA328993
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- 97-18 Marcus, J.H: A flexible cabin simulator. ADA328996
- 97-19 Broach, D: Designing selection tests for the future National Airspace System architecture. ADA329231
- 97-20 Court, M.C., and Marcus, J.H: Use of object-oriented programming to simulate human behavior in emergency evacuation of an aircraft's passenger cabin. ADA329462
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- 97-22 Gronlund, S.D., Dougherty, M.R.P., Ohrt, D.D., Thomson, G.L., Bleckley, M.K., Bain, D.L., Arnell, F., and Manning, C.A: The role of memory in air traffic control. ADA340263
- 97-23 Driskill, W.E., Weissmuller, J.J., Hand, D.K., and Hunter, D.R: The use of weather information in aeronautical decision-making: II. ADA340406
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- 97-25 Gilliland, K., Schlegel, R.E., and Nesthus, T.E: Workshift and antihistamine effects on task performance. ADA340510
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- 98-1 Collins, W.E., and Wayda, M.E: Index of FAA Office of Aviation Medicine Reports: 1961 through 1997. ADA339254
- 98-2 McLean, G.A., and Chittum, C.B: Performance Demonstrations of Zinc Sulfide and Strontium Aluminate Photoluminescent Floor Proximity Escape Path Marking Systems. ADA339339
- 98-3 McLean, G.A., Palmerton, D.A., Chittum, C.B., George, M.H., and Funkhouser, G.E: Inflatable Escape Slide Beam and Girt Strength Tests: Support for Revision of Technical Standard Order C-69b. ADA339410
- 98-4 Wolf, M.B., and Garner, R.P: Effect of an airplane cabin water spray system on human thermal behavior: A theoretical study using a 25-node model of thermoregulation. ADA339365
- 98-5 Canfield, D.V., Smith, M.D., Adams, H.J., and Houston, E.R: Selection of an Internal Standard for Postmortem Ethanol Analysis. ADA339340
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- 98-8 Thompson, R.C., Agen, R.A., and Broach, D.M: Differential Training Needs and Abilities at Air Traffic Control Towers: Should All Controllers Be Trained Equally? ADA340829

- 
- 98-9 Wreggit, S.S., and Marsh, D.K., II Cockpit Integration of GPS: Initial Assessment-Menu Formats and Procedures. ADA341122
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- 98-12 Williams, K.W: GPS Design Considerations: Displaying Nearest Airport Information. ADA346043
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- 98-17 Prinzo, O. V., An Analysis of Voice Communication in a Simulated Approach Control Environment. ADA350523
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- 98-20 Prinzo, O.V., Lieberman, P., and Pickert, E: An acoustic analysis of ATC communication. ADA353962
- 98-21 Canfield, D.V., Smith, M.D., Ritter, R.M., and Chaturvedi, A.K: Preparation of carboxyhemoglobin standards and calculation of spectrophotometric quantitation constants. ADA379272
- 98-22 Broach, D: Summative evaluation of the collegiate training initiative for air traffic control specialists program: Progress of Minnesota Air Traffic Control Training Center graduates in en route field training. ADA355085
- 98-23 Broach, D. (Editor): Recovery of the FAA Air Traffic Control specialist workforce, 1981-1992. ADA355135
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- 99-15 Lewis, R.J., Huffine, E.F., Chaturvedi, A.K., Canfield, D.V., and Mattson, J: Formation of an interfering substance, 3,4-dimethyl-5-phenyl-1,3-oxazolidine, during a pseudoephedrine urinalysis. ADA363777
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- 00-5 Truitt, T.R., Durso, F.T., Crutchfield, J.M., Moertl, P., and Manning, C.A: Reduced posting and marking of flight progress strips for en route air traffic control.
- 00-6 Garner, R.P., Murphy, R.E., Donnelly, S.S., Thompson, K.E., and Geiwitz, K.L: Testing the structural integrity of the Air Force's Emergency Passenger Oxygen System at altitude.
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- 00-8 Williams, K.W: Comparing text and graphics in navigation display design. ADA375445

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